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❧
Illustrated Archæologist.

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**The Cup-and-Ring Sculptures of
Ilkley.**



ILKLEY-IN-WHARFEDALE is favoured beyond most other health resorts in England as regards the numerous attractions it presents, not only to the ordinary tourist in search of fresh air and change of scenery, but also to the antiquary who appreciates the beauties of nature all the more if suitably contrasted with some ivy-clad mediæval ruin or hoary pre-historic monument, over which he may while away many a pleasant hour before he has satisfactorily unravelled the mystery of its past.

It comes as no small surprise to the railway traveller who has just passed through smoke-begrimed Leeds to find himself after emerging from a long tunnel suddenly in the midst of those Yorkshire hills and dales, which it has required all the skill of our greatest

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landscape painter, J. W. M. Turner, to do even common justice to. In Yorkshire (the largest county in England) there are at least five distinct classes of scenery, depending for their leading characteristics on the geological formation, the configuration of the land, and on the industrial occupations of the inhabitants. The sea coast has its own peculiar charm; as everyone knows who has been to Whitby; then there is the wide agricultural plain around the ancient Cathedral city of York; the wolds on the south-east, again, differ as much from this as they do from the dales on the north-west; and, lastly, come manufacturing districts, which, although once doubtless as rural as any other part of Yorkshire, are now truly little better than a blot on the fair face of nature.

Ilkley is in the dale country, being situated in the valley of the Wharfe, and is surrounded on all sides by wild heather-clad moors, rising to 2,310 feet above sea level at Great Whernside, and extending forty miles or more northward as far as the valley of the Tees, which separates Yorkshire from the county of Durham. One of the greatest charms of the scenery lies in the contrast it affords between the green meadows diversified by trees and homesteads at the bottom of the valley and the uncultivated moorland above. The railway station at Ilkley is 300 feet above sea level, and the church and river somewhat lower. The cultivated area extends up the sides of the valley about as far as the 500 feet contour line (see six-inch ordnance map, sheet 186), where millstone grit crags protrude from the soil and form the line of demarcation between the fields and the heather. The slope beneath the cliffs is covered with *débris* fallen from above, and is clothed in places with plantations of trees. The geological strata lie almost horizontally, and smaller ledges of rock crop out at intervals right up to the summit of Rombold's Moor, which lies behind the town of Ilkley on the north. The surface of the moor is thus broken up into a series of terraces, one above the other, instead of the ground sloping uniformly from top to bottom.

The moor is strewn with blocks of grit-stone of varying size, more especially beneath the crags, from which large masses have evidently fallen from time to time. Some of the blocks are very large, and have been in the same position for many centuries, as is evident from the remarkable groovings produced on their upper surfaces by the disintegrating effects of the weather. The

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peculiar shapes and great size of some of the blocks have attracted attention from a very early time, and have led to their being called by special names, such as the Cow and Calf, the Panorama Rock, the Sepulchre Stone, the Noon Stone, the Doubler Stones, the Thimble Stones, the Two Eggs, Neb Stone, Pancake Stone, Gawk Stones, etc.

A great number of the rock surfaces and isolated blocks of grit-stone on Rombold's Moor afford fine examples of the class of pre-historic sculptures known as cup-and-ring markings. They are found neither in the bottom of the valley of the Wharfe nor on the highest parts of Rombold's Moor, but between the 600 feet and 1,100 feet contour lines (shewing the height above sea level on the six-inch ordnance map), that is to say, on, or not far above, the line of crags which forms the boundary between the wild moorland and the cultivated parts of Wharfedale.

If, as seems highly probable, the cup-and-ring markings have a religious significance, it is evident that the immediate neighbourhood of Ilkley was considered for some reason or other to be a peculiarly sacred spot in the eyes of the ancient inhabitants of this part of Yorkshire. In Roman times, when Ilkley was the station of Olicana, on the road from Isurium to Mancunium, the goddess of the Wharfe was worshipped under the name of Verbeia, and in order to propitiate her an altar was erected to her honour. This is now at Myddleton Hall, near Ilkley, but unfortunately exposure to the weather has almost entirely obliterated the inscription. As soon as the people of Yorkshire abandoned paganism in the seventh century, the old forms of worship were superseded, and a Christian church built on the site of the Roman station close to the banks of the Wharfe. Although no traces of the original Saxon church now remain, there are still to be seen in the churchyard the shafts of three beautifully sculptured crosses of the period when Ilkley was within the limits of the ancient kingdom of Northumbria.

In the present article we are only concerned with the pre-historic rock sculptures, which we will now proceed to describe. The cup-marked stones on Rombold's Moor may be conveniently divided into three groups: (1) those lying south-east of Ilkley, near the Cow and Calf rocks; (2) those to the south, near the old baths; and (3) those to the south-west, near the Panorama

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Stone. Owing to the extreme steepness of the hill, which must be ascended before the moor can be reached, and the number of ravines and morasses that have to be encountered in walking across the heather, the explorer will be wise if he makes separate excursions to visit each of the group of cup-marked stones just mentioned, instead of attempting a short cut from one to the other.

The huge grit-stone boulders called the Cow and Calf, one mile south-east of the railway station, are well known to visitors to Ilkley. In shape they bear no resemblance whatever to either a cow or a calf, but the difference in size between the two masses and



Fig. 1.—Stone with Cup-and-Ring Markings, near Pancake Ridge, Ilkley.

their close proximity one to the other may have suggested the idea of the relations of mother and child. These great rocks appear to have fallen at some former time from the cliff above, which is marked on the ordnance map as the Hanging Stones. On a horizontal ledge of rock at the top of the cliff overhanging the Cow and Calf, and at a height of 800 feet above sea level, are several cup-markings, in some cases surrounded by rings, and also having connecting grooves. The whole design is irregular and inferior to most of the other pre-historic sculptures near Ilkley. Its chief interest is, however, that, being in the part of Rombold's Moor most frequented by tourists, it was one of the first which attracted public attention.

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Mr. James Wardell, in his *Historical Notices of Ilkley* (2nd edition, 1881, p. 85), says that

"These singular markings on Rombold's Moor were first observed by a visitor at Ben Rhydding, who happened to be watching the bareing of the especial stones below¹

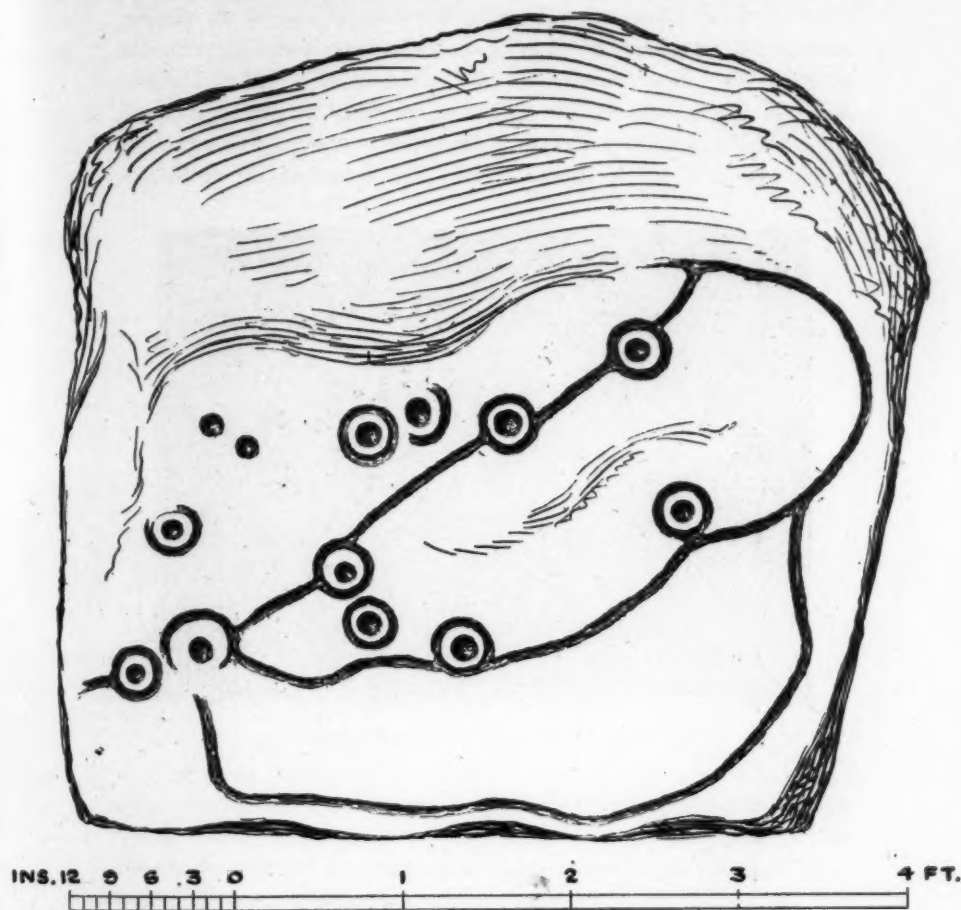


Fig. 2.—Stone with Cup-and-Ring Markings, near Pancake Ridge, Ilkley.

the Cow and Calf, late in 1869 or early in 1870. . . . The first publication of the discovery of the incised cup-and-ring rocks was made in the *Leeds Mercury* April 20th, 1871, and the second in the *Ilkley Guardian*, November, 1871."

¹ This is apparently a mistake, as the sculptures are *above*, not below, the Cow and Calf.

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A quarter of a mile south of the Cow and Calf, higher up the moor, on the comparatively level plateau above Pancake Ridge, is the sculptured boulder shown on fig. 1. It is 1,000 feet above the sea, and is 15 feet long by 12 feet broad by 6 feet high. A central ridge runs along the whole length of the stone, and on the sloping surfaces on each side are carved between forty and fifty cups, in at least nine cases surrounded by a single ring. The Pancake Rock is a large flat slab of grit-stone perched on the edge of the cliffs called Pancake Edge, and exhibiting traces of cup-markings much weathered on its upper surface. Nevertheless the sculptures



Fig. 3.—Cup-marked Stone, near Green Crag, Ilkley.

are sufficiently distinct to show that the peculiar form of the rock had attracted attention to it even in pre-historic times, when it may have been an object of worship or superstitious reverence. About 150 yards west of the Pancake Rock is a stone with cups, rings, and connecting grooves distinctly visible (see fig. 2).

The moor here rises in a series of terraces one above the other, and at the bottom of each terrace a ledge of rock protrudes, forming a cliff, called locally an *edge*. At the foot of Green Crag, which is the next cliff in order above Pancake Ridge, and about a quarter of a mile south of it, is a remarkable enclosure of unknown age.

Near this enclosure, on the east side, are four cup-marked stones of small size, the best of them being that shown on figs. 3 and 4, on which the cups are arranged with much more regularity than usual. There are no rings, but seven cups are placed in a row and surrounded by an oval groove, outside which are other rows of cups, and then a second groove running round the edge of the stone. Mr. W. Cudworth informs me that Mr. Gill, the moor ranger, possesses a number of flint arrow heads and knives of an advanced type, found by him on the plateau above the Cow and Calf.

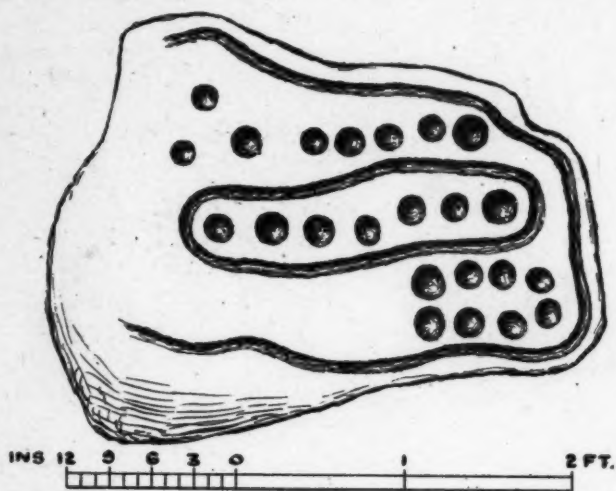


Fig. 4.—Cup-marked Stone, near Green Crag, Ilkley. Scale, $\frac{1}{4}$ actual size.

The most important cup-marked stone of the group lying to the south of Ilkley is that shown on fig. 5. It is situated a mile and a quarter south of Ilkley, at a height of 1,100 feet above the sea, on the tract of moorland between the two roads across Rombold's Moor, one of which leads to Keighley and the other to Bingley. It is to the east of Graining's Head, and not far from Barmishaw Hole. The stone is 12 ft. long by 7 ft. 6 ins. wide by 4 ft. high. The principal surface on which the cup markings are carved slopes at an angle of about 40° with the horizon, but there are also a few cups on the nearly vertical face at the end. An imperfect swastika figure made with a double outline will also be noticed near one

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end. It is similar to one on the Woodhouse Crag Stone, to be described subsequently. The Neb Stone, to the east of this, and also stones near Silverwell Farm and at Willy Hall's Spout, below Ilkley Baths, have cups upon them.

Lastly, we come to the group of cup-marked stones lying to the south-west of Ilkley, which are situated on or near the edge of the line of cliffs which form the natural line of demarcation between Rombold's Moor and the Valley of the Wharfe. These cliffs commence at the Hanging Stones above the Cow and Calf, and extend in a westerly direction for nearly five miles. The height of the top of the cliff at the Hanging Stones is 800 feet above the

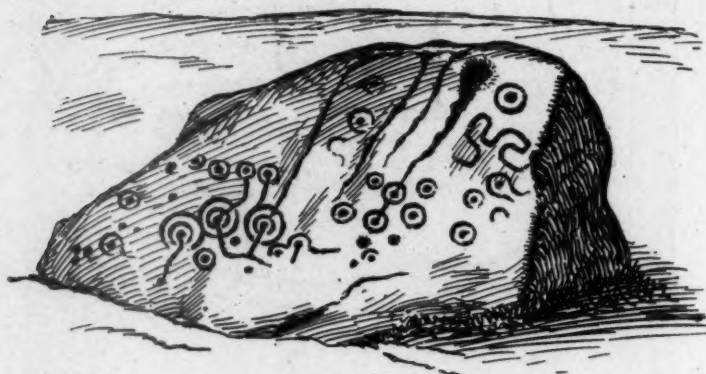


Fig. 5.—Stone with Cup-and-Ring Markings, near Graining's Head, Ilkley.

sea, and there is a gradual rise towards the westward, the level at the other extremity being 1,200 feet above the sea. The portion of the cliffs behind the town of Ilkley makes a sort of amphitheatre, a good deal broken up by small ravines, but the portion of the cliffs to the west of Ilkley is much more uniformly straight. The summit of Rombold's Moor, 1,322 feet above the sea, lies a mile and a half due south of Ilkley.

The first group of cup-marked stones to the south-west of Ilkley to be described is situated near the Panorama Stone, 800 feet above the sea, and one mile south-west of the railway station. The Panorama Stone is reached by taking the road up hill for a quarter of a mile south towards the old baths, and then

turning off to the east along a road which skirts the side of the valley, gradually ascending the whole way. Several of the rocks near the Panorama Stone had traces of cup markings upon them, but many of the sculptures have been destroyed recently by blasting the rocks to obtain building material.

When I first visited Ilkley, in July, 1877, there were three very fine cup-marked stones still *in situ* about one hundred yards to the west of the Panorama Stone, within what seemed to me to be

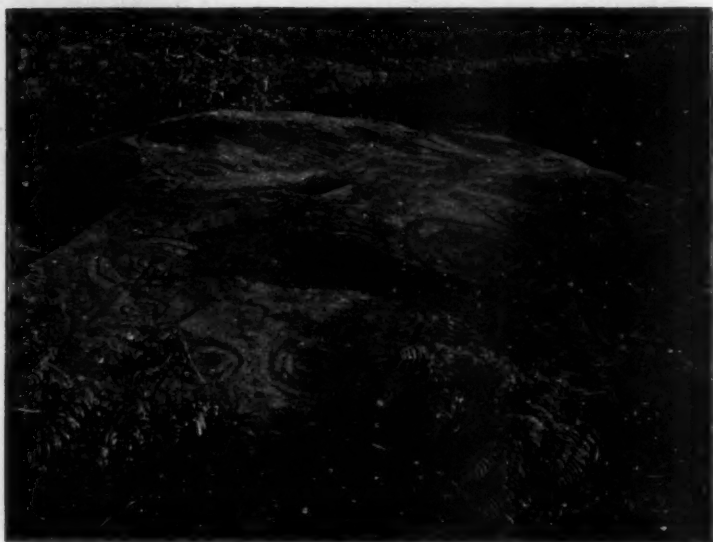


Fig. 6.—Stone with Cup-and-Ring Sculptures, near the Panorama Stone, Ilkley.

a rude enclosure formed of low walls of loose stones. The three stones were almost in a straight line, pointing east and west, the first stone being five feet from the second, and the second one hundred feet from the third. The first, shown on figs. 6, 7, and 8, measured 10 ft. by 7 ft., and its upper surface, which was nearly horizontal, projected a few inches above the ground. The lower portions of the stone were covered with turf until a few years ago, which accounts for the unusual freshness of the carving on the unexposed parts of the surface. (See rubbing on fig. 8.) This is one of the most elaborate examples of pre-historic sculpture that

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has been found in Great Britain. It is remarkable for the ladder-shaped figures connected to the cups and concentric rings, which also occur on the adjoining stone and on a stone near Barmishaw Hole, discovered by Mr. F. W. Fison in May, 1878.

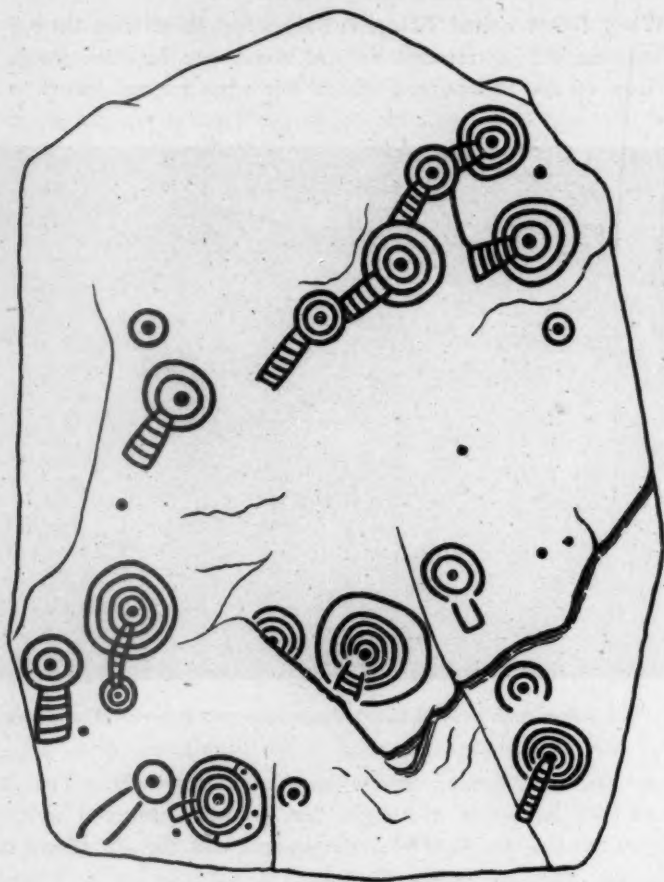


Fig. 7.—Stone with Cup-and-Ring Sculptures, near the Panorama Stone, Ilkley.
Scale, $\frac{1}{2}$ actual size.

I am indebted to Mr. W. Cudworth of the *Bradford Observer* for the following account of the removal of the stone near the Panorama Stone, shown on figs. 7, 8, and 9, from its original place.

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"Some time ago Dr. Fletcher Little, a gentleman of archaeological tastes, was physician at Ben Rhydding Hydropathic Establishment, and took a great interest in the ancient remains upon Ilkley Moors. Anticipating what has since happened, namely, the appropriation of the ground for building purposes, Dr. Little entered into negotiations with the purchaser of the plot, Mr. William Brumfit, and ultimately secured the stone for £10, the



Fig. 8.—Reproduction of Rubbing of Cup-and-Ring Sculptures on Stone near the Panorama Stone.

owner having placed double this value upon it as an archaeological curiosity. The Local Board of Ilkley undertook, in consideration of Dr. Little's good offices, and recognizing the value of such a relic, to provide a 'local habitation' for it opposite to St. Margaret's Church, Ilkley, and the stone is now railed off by a substantial palisading, where it can be seen by

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any passer-by. Three fragments have been removed, but the dimensions of the principal stone are 10 ft. by 9 ft. The date of the transfer to the Local Board was September, 1890. Dr. Fletcher Little is now medical officer of Harrow School."

The removal of this extremely interesting specimen of pre-historic sculpture from its original site is to be extremely deplored,

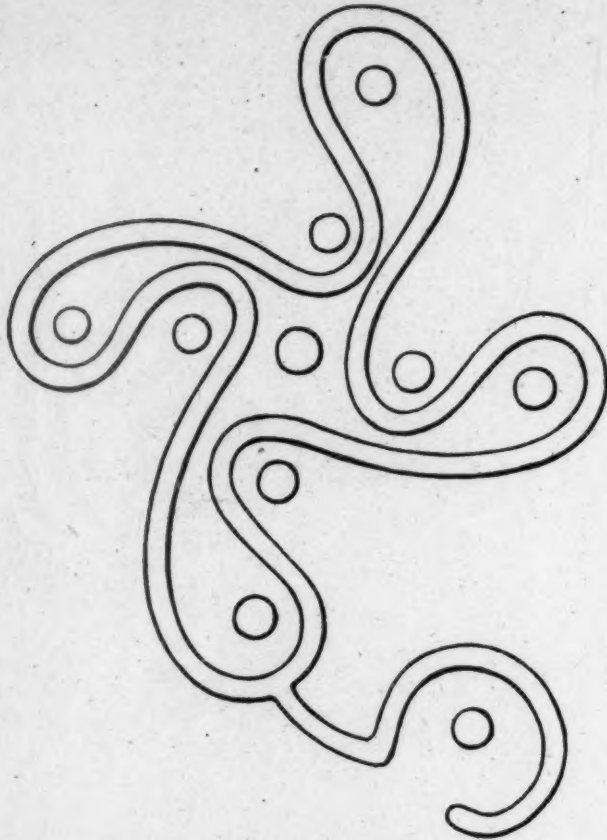


Fig. 9.—Curved Swastika on Stone on Woodhouse Crag, Ilkley.

especially as it was cut up into four pieces in order to transport it more easily, and it is still exposed to the weather. Dr. Fletcher Little's efforts to prevent the destruction of the stone are worthy of all praise, but what will posterity say of the rich mill owners of

Yorkshire who allowed the site on which it stood to be built over, when a comparatively small sum would have enabled it to be preserved as one of the most valuable ancient monuments in Great Britain?

Half a mile west of the Panorama Stone a large, almost rectangular, block of grit-stone is to be seen on the edge of Woodhouse Crag, the level of which at this point is 900 feet above the sea. The stone is 19 ft. long by 7 ft. broad by 4 ft. 6 ins. high. It has on its horizontal upper surface two rock basins, perhaps of natural formation, and the curious device shown on fig. 9.

This is the most interesting of all the pre-historic sculptures in the neighbourhood of Ilkley, because it affords a connecting link between the art of the Bronze Age in England and that of the same period in Sweden, the origin of which can again be traced to Mycenæ. The shape of the figure is a sort of curved swastica formed of a double line, and it belongs to a special class of designs found on Mycenæan metal-work, which seem to have been suggested by a cord following a winding path round a series of fixed pins. It occurs on some of the gold buttons illustrated in Dr. Schlieman's *Mycenæ* (pp. 259, 265, and 326), and it is evident that it is intended for a four-armed swastica, because the three-armed swastica or triskele is represented on other buttons from the same place. In Denmark this figure is found on metal-work (see sword-hilt engraved in Worsaae's *Industrial Arts of Denmark*, p. 55), and in Sweden on a rock sculpture at Tossene (see Axel Holmberg's *Scandinaviens Hallristningar*, fol. 32, fig. 102). It is given on fig. 10 for comparison.



Fig. 10.—Curved Swastica
Figure sculptured on rock
at Tossene, Sweden.
(After Holmberg.)

This swastica figure may have suggested the following school-boy's puzzle, of which it forms the solution.

"Four rich men and four poor men have their houses situated symmetrically at the corners of two squares, one within the other, the houses being in two straight lines at right angles to each other. The houses of the rich men are outside; in the centre is a pond of spring water, and the houses of the poor men between the houses of the rich men and the water supply. The rich men desire to build a wall, which, although giving them free access to the water, shall exclude their poorer neighbours. How is it to be done?"

Proceeding a mile westward from Woodhouse Crag along the edge of the cliff the Noon Stone will be reached, and on the way the Sepulchre Stone and a cup-marked stone near Piper's Crag will

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be passed. The Noon and Sepulchre Stones are devoid of sculpture, but at the bottom of the cliff below the Noon Stone and a little further to the west is a boulder with cup-and-ring markings upon it.

The long line of cliffs called Addingham Edge, which runs nearly due east and west and forms the boundary between Rombold's Moor and the Valley of the Wharfe, terminates three miles west of Ilkley, gradually rising all the way until a height of 1,200 feet above the sea is attained. About half a mile south of the west end of Addingham Edge, at a level of 1,100 feet above the sea, and overlooking the valley of the river Aire, are two extraordinary freaks of nature called the Doubler Stones. They resemble two gigantic toadstools (see fig. 11),



Fig. 11.—The Doubler Stones on Silsden Moor, near Ilkley.

the form of which have been produced by the weathering of the softer portions of the stone beneath, thus leaving the harder slab at the top projecting all round. Both of the stones show traces of cup-markings on the upper surfaces, and one of them has three large rock basins with connecting channels on it. My attention was first called to the Doubler Stones by my old friend, Mr. F. W. Fison, who first noticed them in July, 1878. They are the most weird looking objects I have ever seen, and their situation in the midst of the wildest scenery of the Yorkshire moors is very striking. If such things as Druids' altars ever existed, it would not require any great stretch of the imagination to connect the Doubler Stones with the horrible rites the pagan priests are supposed to have performed.

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Between Bingley and Keighley, four miles south of the Doubler Stones, a Druid's Altar is shown on the Ordnance map, near which is a stone with cup markings upon it.

Having concluded the description of the Ilkley cup-marked stones, the reader will no doubt expect to be told whether we have any theories to explain their meaning. Well, in the first place, we may at once dismiss the views put forward by the "shallow sceptic, or so-called man of science," that the markings are either natural or have been carved by some shepherd who wished to while away an idle hour. Equally futile are mere guesses quite unsupported by facts, such as that these sculptures are maps of the stars or of pre-historic villages, a rude sort of picture writing, or for playing some kind of game.



Fig. 12.—Bronze Knife, with engraved figures, found in Jutland.

Reproduced from the "Mémoires de la Société Royale des Antiquaires du Nord," N.S., 1877, p. 341.

All archæologists who have given the matter serious consideration agree that the cup and ring markings have a symbolic origin, otherwise it is difficult to account for the monotonous repetition of the same figure (not used decoratively, except in rare instances), and for its occurrence over so wide a geographical area. The irregularity of the arrangement of the cups and rings on the slabs and rock surfaces is possibly due to their having been carved by several different persons at different times, instead of having been designed and executed by a single individual. The cup-marked stones on Rombold's Moor are in many cases near ancient tracks across the high ground, and there may be some analogy between the practice of carving these symbols and that of leaving rags on the bushes for votive offerings as is done in Corea and Persia when going over a mountain pass in order to propitiate the spirit of the mountain. That

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the symbols are religious seems probable because they are found so frequently associated with sepulchral remains, such as megalithic circles, menhirs, chambered cairns, and stone cists, and often on the cover stones of cinerary urns. The character of the localities where the sculptured rock surfaces and boulders are found (generally in lofty situations on the borderland between the cultivated valleys and the barren hill country) are just such as would be chosen by a pagan people for what are called "high places" in the Bible. Five miles south of Ilkley, on the Airedale side of Rombold's

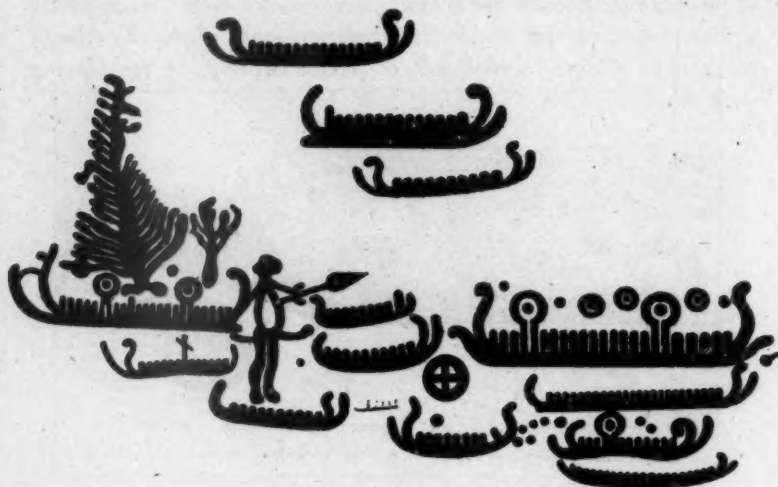


Fig. 13. —Rock Sculpture with Ships and Cup-and-Ring Markings at Lökeberget, Bohuslän, Sweden. (After Holmberg.)

Moor, is a typical "high place" called Baildon Hill, near which cup-marked stones and numerous other pre-historic remains have been found. (See *Journal, Bradford Historical and Antiquarian Society*, September, 1882, and *Archæologia*, vol. 31, p. 299.) The sacred nature of many of the localities is also indicated by the names given by the common people to such rocks and stones in different parts of Europe, *i.e.*, Witches' stones, Elf stones, Heathen stones, Balder's altars, etc., and by the superstitious reverence in which they are still held. The association of cup-and-ring markings with representations chiefly of a symbolic character on rock surfaces in Bohuslän, Sweden, is another indication that the cups and rings

are symbols also. The same cycle of figure subjects and symbols which appear on the rock sculptures of Bohuslän is also characteristic of the small bronze knives found in women's graves in Denmark. On one of these knives shown on fig. 12, which is engraved in Worsaae's *Industrial Arts of Denmark* (p. 98, fig. 132), is a ship with two men standing up in it. Their heads are indicated by circles with rays issuing all round like a halo of light. Dr. Worsaae identifies this with the sun ship of ancient Egypt. On comparing the representation on the bronze woman's knife with the rock sculpture at Lökeberget, Bohuslän, Sweden, shown on fig. 13, it will be noticed that the heads of the two men are conventionalized into cups and rings,



Fig. 14.—Rock Sculpture with Man having Cup-and-Ring instead of Face, Bohuslän, Sweden. (After Holmberg.)



Fig. 15.—Stone with pre-historic Sculpture found near Ingelstrup.

Reproduced from the "Memoires de la Societé Royale des Antiquaires du Nord," N.S., 1877, p. 399.

and it is evident that this is done intentionally as the same thing occurs on another rock sculpture in Bohuslän (see fig. 14), and on a slab found near Ingelstrup, Denmark (fig. 15). The deduction is

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that the cup and ring is the symbol of some deity, perhaps the Sun-God, who is indicated by substituting a cup and ring for his head.

Lastly, as to the probable date of cup-and-ring marks. The cups alone may possibly have been used at the end of the Neolithic period, as they occur on some of the dolmens in Brittany, Wales, and Scandinavia, and in association with stone implements in tumuli in Great Britain, but the more elaborate cup-and-ring sculptures clearly belong to the Bronze age. The Swedish rock sculptures are known to be of this period, because the axes represented are of the typical Scandinavian Bronze Age form (see fig. 16), and because the art of the sculptures is similar to that



Fig. 16.—Rock Sculpture with Man holding Axe of Bronze Age form, Bohuslän, Sweden.
(After Holmberg.)

of the bronze woman's knives found in Denmark. Where cup-marked stones have been found in Great Britain with sepulchral urns, as at Coilsfield, Ayrshire (*Proc. Soc. Ant. Scot.*, vol. 6, appendix p. 27), Way Hagg tumulus on Ayton Moor, near Scarborough, and Robin Hood's Butts, near Ravenhill, in the same district (*Jour. Brit. Archæol. Assoc.*, vol. 6, p. 1), and at Rudda Knowes, between Hayburn Wyke and Robin Hood's Bay on the east coast of Yorkshire (*Archæologia*, vol. 34, p. 446), the shapes of the urns and the style of the ornament have indicated that they were of the Bronze Age. The stones with cup-and-ring markings from Rudda Knowes, now in the Scarborough Museum, are shown on figs. 17 and 18.

Since a local museum has been established at Ilkley and the

Local Board seem to be alive to the value of the antiquities of the district as an attraction for tourists of archaeological tastes, it is to be hoped that the destruction of the pre-historic sculptures will go no further. I beg to express my acknowledgments to Mr. Cudworth for the information he has supplied with regard to



Fig. 17.—Stone with Cup-and-Ring Markings in the Scarborough Museum.



Fig. 18.—Stone with Cup-and-Ring Markings in the Scarborough Museum.

the removal of the Panorama Stone sculptures, and to the late Dr. Call and to Mr. F. W. Fison for first directing my attention to previously undiscovered examples, and to the member of the Bradford Scientific Society by whom the photographs used to illustrate this article were taken.

J. ROMILLY ALLEN.

NOTE.—Since the above was written the volume of the *Proceedings of the Society of Antiquaries* for 1895 has been issued containing illustrations of a very beautifully ornamented "food vessel" urn of Bronze Age type found in a stone cist, on the cover stone of which were some fine cup-and-ring sculptures, a further confirmation of the views expressed in this article as to the period to which they belong. The cist was discovered at Cunningham, half a mile east of Tillicoultry. In discussing the possible religious meaning of cup-and-ring markings, it should have been mentioned that the figure of Venus on the Romano-Gaulish terra-cotta plaques is nearly always associated with a symbol of the same shape as the cup-and-ring markings, but in relief (see *Revue Archéologique*, 3rd series, vol. xi, p. 144, and Roach Smith's *Collectanea Antiqua*, vol. vi., p. 53.)

The "Dwarfie Stone" of Hoy, Orkney.

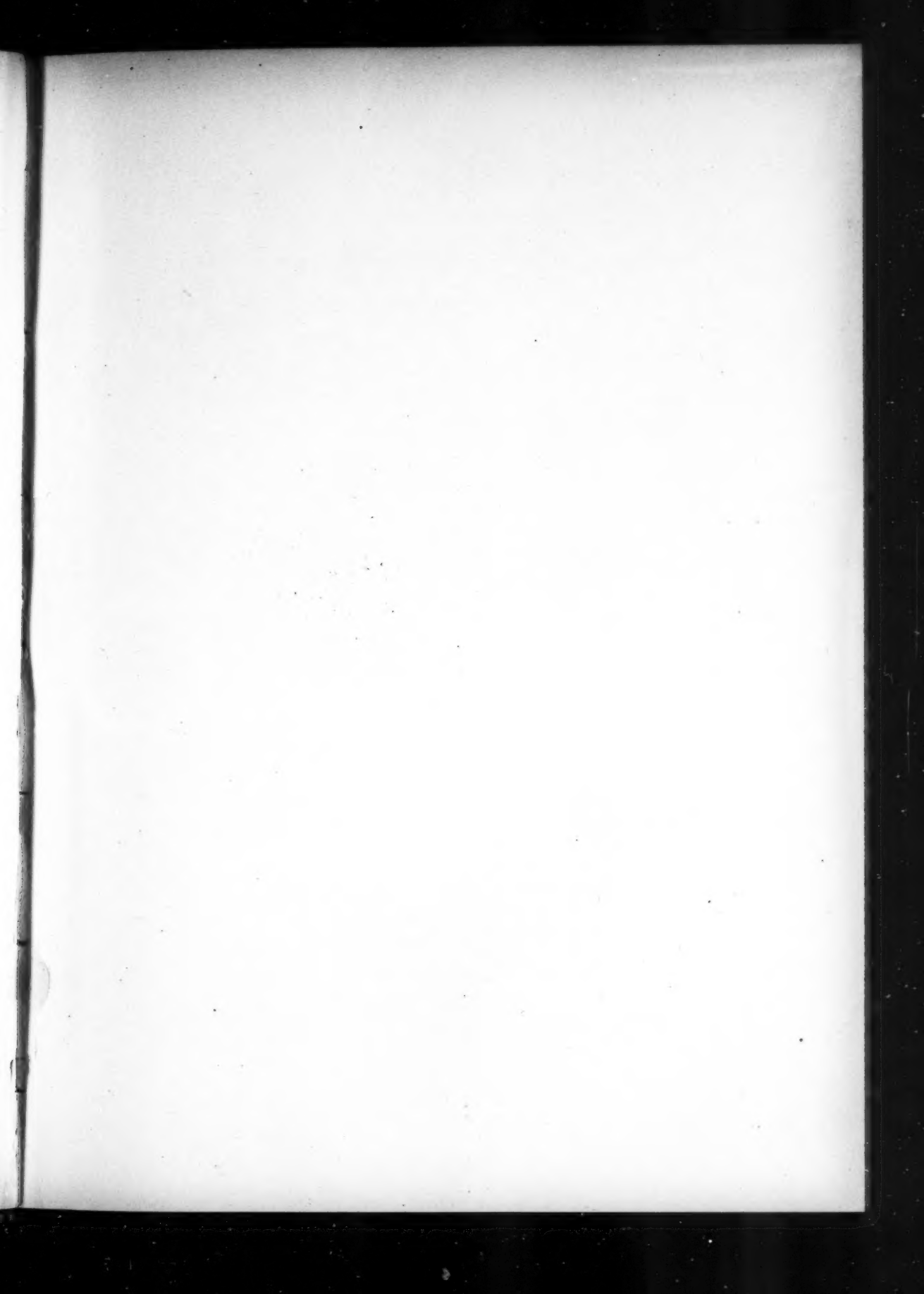
NOTE.—The works referred to in this paper will be found in the Bibliography at the end.



HE Dwarfie Stone is a large oblong wedge-shaped block of sandstone, lying broadside on the ground, in which are excavated a passage and two chambers. It lies in the valley south of the Ward Hill of Hoy, in Orkney, and is familiar to those who have read Sir Walter Scott's *Pirate*. The earliest known record occurs in 1529, when its original use was as much a matter of speculation as it is now. Local tradition views it as the former residence of a giant, in point of strength, or dwarf, while on the other hand archæologists have almost unanimously described it as a hermit's cell.

No measured plans nor truly exact description of the stone and its surroundings are known to have been published. To supply this want Mr. Robert Flett of Bellevue, Orphir, and the writer, with Mr. Joseph Halcro and Mr. James Tomison, as skipper and crew, set sail from the Breck, Orphir, on Monday, October 7th, 1895, landing at Sea Geo, in Hoy, about two miles N.E. from the stone. The time occupied in tacking against a dead head wind and tide, and in a tedious walk, to and from the stone, of some four miles, over peat bog, hill and dale, under warm sunshine, and having to return betimes to the boat to catch a favourable tide, made it impossible to do more than take the bare dimensions of the stone and cells. The writer hopes to revisit Hoy next summer and make a closer examination of the stone and the surrounding objects of interest.

Hoy, or, as its name betokens, the hill island, is the south-westmost, the second largest, and the most mountainous of the





MAP OF HOY,
 AND PART OF THE MAINLAND OF ORKNEY.

SCALE ONE INCH TO THREE MILES.

Orkneys. Its west coast faces the Atlantic, with, perhaps, the grandest range of cliffs in the kingdom. The island is now divided into two parishes, viz., Hoy, the Upland in Saga times, to the north, in which is situated the Dwarfie Stone, and Walls, or Waas, the old Vaga-land, or bay-land, to the south.

The valley in which the Dwarfie Stone is situated (see map) cuts across the island from the Bay of Quoys on the east coast due south to the Dwarfie Hamars, and then south-westerly to Rackwick on the west coast, curving around the Ward Hill, which bounds it on the north, and having the Dwarfie Hamars and other smaller hills on the south.

The Stone lies on the southern slope of this valley at an altitude of about 250 feet above the sea level, and is distant about one and a half mile due south from the Bay of Quoys, the nearest landing place. Some 900 feet further up the slope, to the south of the Stone, rise the Dwarfie Hamars, a crescent-shaped range of cliffs 700 feet above the sea level and facing the north-west, from under which there is said to be a very fine echo.¹ The Stone appears to have fallen down from this cliff. Mr. Moodie Heddle, the proprietor of the island, informs me that there is a similarly sized stone further west along the same hill face, which, as far as he can ascertain, has always been called the "Patrick Stone," or "St. Patrick's Stone," a fact hitherto unknown outside of Hoy. To the west lies Trowie Glen, and to the east Red Glen, both running southwards. Northward from the stone lie several conical mounds, which appear to be natural, or moraines, and they are not noted on the ordnance maps. Still further to the north, on the east bank of the Burn of Quoys, and within half a mile of the sea shore, the ordnance maps mark a tumulus, and, on the opposite side of the burn, a Standing Stone. North-east again of this, on the sea shore, is a large mound called the Green Hill, covering the ruins of a broch or round tower, in which human remains were found in 1812² and again in 1887, when several cists were unearthed by Mr. Moodie Heddle and Mr. J. W. Cursiter. In former days the Ward Hill of Hoy possessed an "Enchanted Carbuncle," seen about noon, during sunshine, in the months of June and July. The Ward Hill, to the north of the stone (1,565 feet), is the highest in Orkney.

¹ Tudor.

² Ordnance Map.

86 *The "Dwarfie Stone" of Hoy, Orkney.*

On its top are two wells. The ordnance maps mark a "Pict's Well" at the foot of the west side of the hill.

Sir Walter Scott, who visited the Dwarfie Stone on August 16th, 1814, describes the island of Hoy and the locality of the stone as follows:—"We have all day been pleased with the romantic appearance of that island [viewed from the mainland on the east], for though the Hill of Hoy is not very high, perhaps about 1,200 feet [1,565 ordnance map], yet rising perpendicularly (almost) from the sea, and being very steep and furrowed with ravines, and catching



Fig. 1.—View of the Dwarfie Stone from the south-east, with the Nowt Bield in the Ward Hill beyond.

(From a Photograph by Messrs. G. W. Wilson & Co., of Aberdeen. No. 10,820.)

all the mists from the western ocean, it has a noble and picturesque effect in every point of view. We land upon the island [at the Green Hill, N.E. of the stone], and proceed up a long and very swampy valley broken into peat-bogs. The one [north] side of this valley is formed by the mountain of Hoy, and the other by another steep hill, having at the top a circular belt of rock [Dwarfie Hamars]; upon the slope of this last hill and just opposite where the principal mountain opens into a wide and precipitous and circular *corrie* or hollow [Nowt Bield] lies the Dwarfie Stone."

The "Dwarfie Stone" of Hoy, Orkney. 87

The stone is described by Hugh Miller as an "exceedingly compact" block of "pale Old Red Sandstone, bearing atop a few stunted tufts of vegetation" along its east side, as it still does. Close to its south end there is a spring of water which runs into a subterranean channel passing northwards under the stone.

The external measurements of the stone (see figs. 2 and 3)

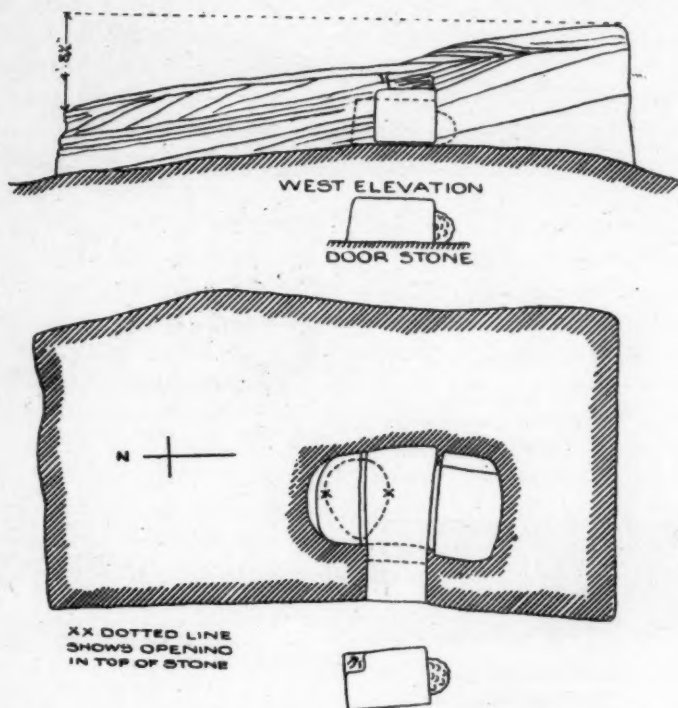


Fig. 2. Elevation and Sectional Plan of the Dwarfie Stone. Scale $\frac{1}{16}$ actual size.

are:—From south to north, 28 ft. 3 ins. along the east side, and 1 ft. shorter on the west; 14 ft. 6 ins. broad at south end, 13 ft. at north end, and varying from 14 ft. to 15 ft. in the middle. At the south end it is 6 ft. 6 ins. thick, diminishing to about 3 ft. at the north. The top of the south end is about 4 ft. 8½ ins. above that of the north. The upper face of the stone slopes slightly towards the east.

88 *The "Dwarfie Stone" of Hoy, Orkney.*

On the west side a doorway is cut and continued straight in, forming a passage which gives access to two chambers, one on each side, with an opening in the top, over one of the chambers.

The following are the dimensions of the excavations:—

Doorway.—The south jamb is 9 ft. from the south-west corner of stone; the threshold is 1 in. above the ground; the opening is 2 ft. 11 ins. wide by 2 ft. 5 ins. high; the lintel is 2 ft. 6 ins.

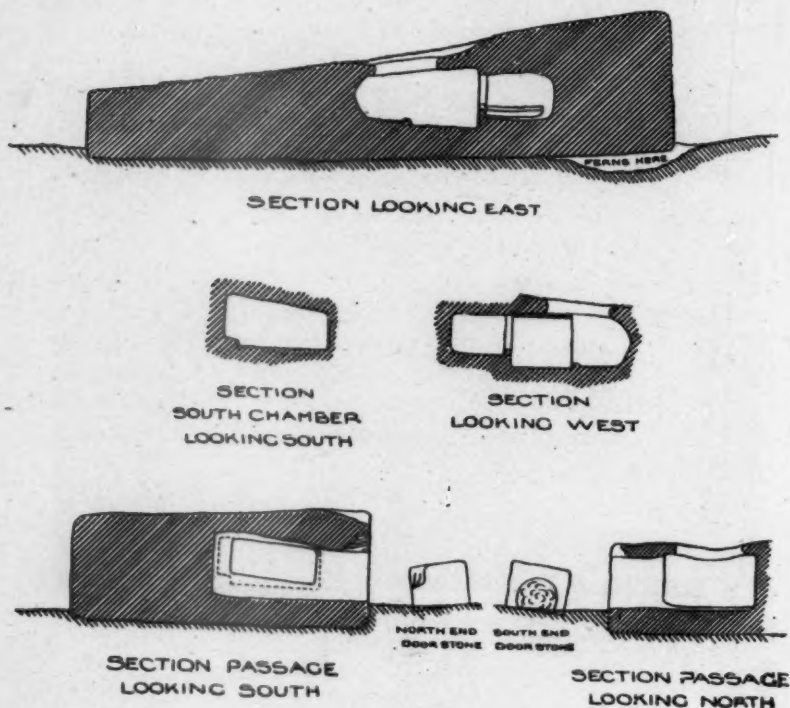


Fig. 3.—Sections of the Dwarfie Stone. Scale $\frac{1}{8}$ actual size.

wide at the south, and 2 ft. 7 ins. at the north jamb. The soffit of lintel is level, and has a splay up of one and a half inch on its inner edge, from which there is a further rise of half an inch to the ceiling of the passage. The inner face of lintel bulges slightly inward towards the passage. The jambs correspond with the lintel in width, and their inner faces are formed by the west jambs of the two chambers.

Passage.—The floor and sides of the passage are a continuation of the doorway opening, the only demarcation being the rise from the soffit of the lintel to the ceiling of the passage. The length on north side is 4 ft. 5 ins. from inner face of lintel to east end of passage, and on south side 4 ft. 11 ins. The width, at west end, is the same as door, viz., 2 ft. 11 ins., widening to 3 ft. 3 ins. in the middle, and to 3 ft. 4½ ins. at the east end. The ceiling is 2 ft. 7 ins. high at west end, and all along north side, and rises along south side to 3 ft. ½ in. at south-east corner.

South Chamber.—This chamber extends along the south side of passage at a higher level, has a pillow at its east end, and is enclosed with curb and projecting jambs. The floor of the chamber slopes up from its west end to the pillow. The entrance is 4 ft. 1 in. wide by 1 ft. 8 ins. high. The curb, which is 3 ins. thick, is 9 ins. above floor of passage, and 4 ins. above floor of chamber at west jamb, rising to 13 ins. and 6 ins. respectively at the east jamb. The west jamb is in line with inner face of lintel of doorway, and projects 2½ ins. from west end of chamber, while the east jamb projects 10 ins. from east end of passage, and 7 ins. from east end of chamber. There is no drop lintel, the ceiling opening straight into the side of passage. The internal dimensions of chamber are:—4 ft. 11 ins. long from west to east; 2 ft. 8½ ins. wide at each end, and 3 ft. 2 ins. in the middle; 1 ft. 10 ins. high at west end, rising to 2 ft. 5½ ins. at east end in front of pillow. The pillow, which is cut out of the solid stone at the east end, is 8 ins. broad, 3½ ins. high in front, and 1½ in. higher at back.

North Chamber.—This chamber, which occupies the whole of north side of passage, and at a little higher level, is more rudely cut, and not so shapely as the other. It is without projecting jambs or drop lintel, being only enclosed by a curb. Its east end and ceiling are a continuation of those of the passage, while its west end is in line with the inner face of lintel of door. The curb is 3 ins. thick, 2 ins. high from floor of passage, and about 1 in. from floor of chamber.

The internal dimensions are:—4 ft. 5 ins. long from east to west; 1 ft. 3 ins. wide inside of curb at each end, and 2 ft. in the middle. The back, or north side, is hollowed out 6 ins. in the centre, between floor and ceiling.

General Dimensions of Excavations.—The width of the excavation

from north to south is 9 ft. 6 ins., and from outer face of jambs of door to east end of passage 7 ft. 5 ins., while the greatest height is 3 ft. $\frac{1}{2}$ in. in the passage.

Opening in Top.—Partly over the passage and partly over the north chamber there is an opening in the top 3 ft. wide from north to south by 3 ft. $8\frac{1}{2}$ ins. from east to west, the western extremity being 2 ft. 11 ins. from outer face of jambs of door. Around the edge of this opening the stone is from 6 to 7 ins. thick, and has been much chipped and worn away, so that it is impossible to say whether the opening formed part of the original design.

Door.—Two feet in front of the doorway, and apparently made to fit it, lies a hewn oblong block of sandstone, with a roughly cut conical protuberance at one end. It measures 3 ft. 11 ins. long from north to south at the top, and 4 ft. 3 ins. at the base, 2 ft. 9 ins. broad, and 2 ft. 1 in. high. The protuberance, which is on the south end, is 1 ft. 9 ins. in diameter, and projects 10 ins. The north-east corner of stone is broken away. This stone is consequently 2 ins. narrower and 4 ins. lower than the doorway.

Tool-marks.—The surface of the stone throughout the excavations still clearly shows the marks of the tools, leaving a rough face formed by small hollows, as though produced by a pickaxe.

Inscriptions.—Hugh Miller states that when he visited the stone in 1846 the pillow was lettered over with names of visitors, but only two decipherable, H. Ross, 1735, P. Folster, 1830, and "the rain still pattered overhead, and with my geological chisel and hammer I did, to beguile the time, what I very rarely do, added my name to the others," viz., H. Miller, 1846. All these names are still visible. Mr. Moodie Heddle informs me that Hugh Ross was one of the Rosses of Shandwick, and was factor for the estate of Melsetter, and P. Folster was a local carpenter. On the south end of the stone outside is cut the name "Guilemus Mounsey in large capital letters from right to left, with the date A.D. 1850. Some Persian poetry is inscribed underneath in the native characters. This gentleman, who was of a rather eccentric turn, slept a night or two within the Dwarfie Stone."¹

Mr. Heddle says that he understands this gentleman was a Major Mounsey of the Indian army, who had been one of our spies

¹ Fergusson.

in Afghanistan and Persia. He took up his abode, with knapsack, in the Dwarfie Stone. From his odd habits, yellow Persian shoes, and also because he wore a beard—at that time uncommon—the people thought a "mad Jew" had taken possession of the stone. The translation of the Persian poetry, Mr. Heddle thinks, runs as follows:—"O God! I am pierced to the heart, and very sorrowful, I wake all night, and study and learn patience." The sorrow referred to a swarm of midges which had invaded the stone much to his discomfiture.

The earliest known record of the Dwarfie Stone is found in a

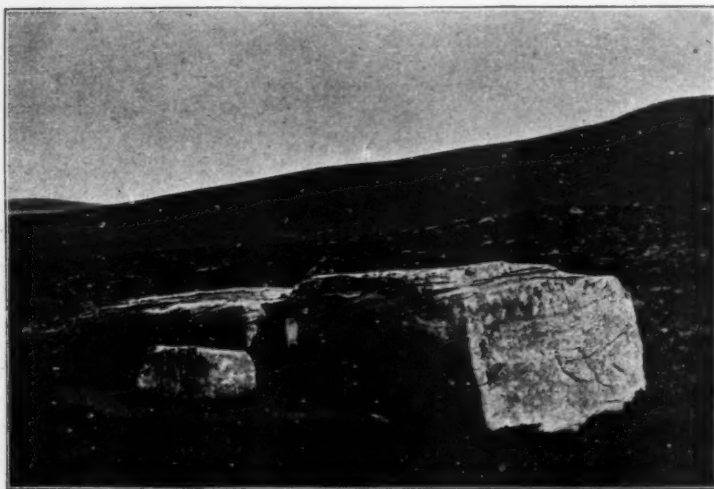


Fig. 4.—View of the Dwarfie Stone from the south-west, showing entrance to chamber and block for closing it up lying in front.

(From a Photograph by Messrs. G. W. Wilson, of Aberdeen. No. 550.)

Latin description of Orkney in 1529 by Jo. Ben, an unknown author, variously identified as John the Benedictine, or John Bellenden. Ben relates that the chambers had been originally made by a giant (*i.e.*, in point of strength) and his wife, and that the latter was *enceinte* at the time, as was shown by her bed, which had the shape of her body. He was unable to account for the use of the door stone farther than that it was related that another giant, who was at enmity with the occupant of the stone and grieved at his prosperity, made the door stone to fit the size of the entrance so that the

occupant might be shut in and perish from hunger, and that thereafter when he himself ruled the island he might have the stone for his own use. With this end in view the other giant took the stone, thus made, to the top of the mountain, and with his arms threw it down into the entrance. The giant inside awakened, and found himself in a quandary, being unable to get out, whereupon he made a hole in the roof with his mallets, and so escaped.

In Bleau's *Atlas* (1662) the stone is called the Dwarves' Stone, *pumilionum lapis*, or commonly "Dwarfie Steene." It is also related that it was a common belief that the cells conduced to the begetting of children by those couples who might live in them. Wallace, Brand, and Barry repeat the giant legend. In 1792, Principal Gordon found a tradition in Orkney that a monk from the Western Isles led a recluse life in Hoy. Sir Walter Scott states that the Orcadians had no tradition about the stone excepting that they believed it to have been the work of a dwarf, to whom, like their ancestors, they attributed supernatural powers and malevolent disposition, and they conceived he might be seen sometimes sitting at the door of his abode, but vanished on a nearer approach. Possibly the name of the stone, together with Scott's knowledge of the dwarf in Northern mythology, may in some measure account for this dwarfing of the original giant legend. Curiously enough, in the *Pirate* the stone is inhabited by a troll, *i.e.*, a giant or huge creature. Dr. Clouston, in his *Guide to Orkney*, states that offerings used to be left in the stone by visitors.

Mackaile, in 1664, and Brand, in 1700, mention the stream running under the stone.

It may be noted that Ben, in 1529, described the doorstone as *stopping* the entrance, *ostium habet obtrusum lapide*; later writers, including Ployen, in 1839, describe it as *standing* before the entrance; Gordon, in 1792, gives the longest dimension as its *height*, whereas Hugh Miller, in 1846, found it lying *prostrate*, as at present.

The hole in the roof was considered large enough in 1529 for a "giant" to get through; Mackaile entered by it in 1664; Gordon gives its diameter, in 1792, as 2 feet 9 inches; and Sir Walter Scott found it a shapeless hole in 1814, probably not much less than at present.

The following writers believed the stone to have been a hermit's cell:—Wallace, Ployen, Barry, Pocock, Daniel Wilson, Neale, and Sir

The "Dwarfie Stone" of Hoy, Orkney. 93

George Dasent. Brand thought it might have been for the use of some dwarf, as its name implied, or the retired cell of some hermit, or it might have been called Dwarfie Stone *per antiphrasin*. Sir Walter Scott concluded that the mounds which extended from the stone to the shore indicated that the monument was of heathen times, probably a temple of some northern edition of the *Die Manes*, and that from the absence of any Christian symbols, and having the door on the west side, it did not seem to have been a hermit's cell. Dr. Clouston mentions that a celebrated antiquary gave his



Fig. 5.—View of the Dwarfie Stone from the north-west, with the Dwarfie Hamars beyond.

(From a Photograph by Messrs. J. Valentine & Sons, of Dundee. No. 10,430.)

opinion that it was probably at one time a heathen altar, and afterwards converted into a hermit's cell.

The mounds, which Sir Walter Scott noted as extending from the stone to the shore, have no appearance of forming a heathen monument. In the first place the conical mounds close to the stone have every appearance of being natural, or moraines. In this view Mr. Moodie Heddle concurs. Mr. Peach and Mr. Horne in their *Geology of the Orkneys* (*Tudor's Orkneys*, p. 194), state that traces of local glaciers mainly exist in Hoy, and that in the valleys draining

the conical groups of hills moraines are to be found of great size. As regards the tumulus and Standing Stone, on the Burn of Quoys, marked on the ordnance maps, it will be as well to bear in mind Mr. Heddle's warning that all the standing stones he has seen there have been, he thinks, the sides or jambs of the doors of turf pigsties, and that the tumulus, in which there are numbers of stones, is clearly artificial, but he doubts if it is old, and that it may have been a Norse or Shetland mill on the burn. As has been already mentioned the Green Hill on the sea shore is the ruins of a broch or round tower.

In the opinion of Dr. Barry the stone had perhaps no just claim to be ranked among the monuments of antiquity in Hoy. The excavations fell unspeakably short of Neil's expectations, and were, he thought, the work of some idle fellow who had amused himself by cutting two holes or cells. Considered simply as a work of art or labour, the stone did not stand high in Hugh Miller's opinion, and he estimated that he could have executed such another excavation to order in some three weeks or a month.

It may be as well to point out a few of the more glaring inaccuracies made by some of the foregoing writers in their descriptions of the stone. Wallace and Gordon place the stone as lying from east to west, with the entrance on the south side. Brand places it in the valley north of the Ward Hill and lying from north to south, with entrance on east side. Martin and Defoe also both place the entrance on the east side. No notice need be taken here of the measurements of the stone and cells given in many of these accounts; they differ considerably, and some are very inaccurate.

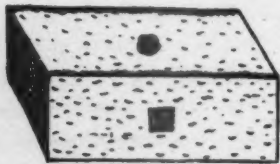


Fig. 6.—Wallace's view of the Dwarfie Stone.

The first known illustration of the stone is given by Wallace, of which a facsimile is here reproduced (see fig. 6) through the courtesy of Mr. William Brown of Edinburgh.

Sir Robert Sibbald gives an illustration on the margin of his map of Orkney, similar to Wallace's, but with the addition of a plan drawn upon and in relation to the elevation, as is frequently done in architectural drawings. The result is misleading, as the plan has the appearance of forming one sliding up, and two hinged doors to the entrance.

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Bishop Pocock's illustrations are reproduced here (see figs. 7 and 8) through the courtesy of the Scottish History Society.

Other illustrations are given in Barry's *History*, Wilson's *Voyage*, Lady Stafford's *Views in Orkney*, and Reid's *Pictures*, all more or less inaccurate. The latter purports to be a view of the back of the stone, with Trowie Glen in the distance, whereas it is from the south, and shows the Nowt Bield beyond, as in the photographic view (see fig. 1).

Bleau's Atlas describes the well on the top of the Ward Hill as rising from the very heart and foundation of the mountain, of



Fig. 7.—The Dwarfie Stone. Bishop Pocock's view from south-west.

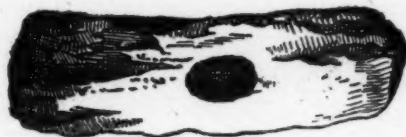


Fig. 8.—The Dwarfie Stone. Bishop Pocock's Plan of Top.

wondrous clearness, extraordinary pureness, pleasant for quenching the thirst, and of such lightness that anyone could drink a full cask, *dolium*, of its water without feeling any heavier afterwards. When Low visited Hoy in 1774, he found that near the top of the Ward Hill the heath was succeeded by a spongy marsh, which continued more or less to the top, on which there was a small loch, which seldom dried in the hottest summer.

Mackaile, who visited Hoy *c.* 1664, was told by the proprietor of the place that from the top of the eastmost mountain (the Ward Hill) at 1 p.m., and for one hour during ten or twelve days in the

middle of June and July, when the sun was shining, a great light, like the reflection from a large mirror, was seen by anyone standing at the Bu, two miles from the top of the mountain, and that the proprietor had several times sent men in search without finding anything extraordinary. Wallace, in his account (c. 1684), after describing the Dwarfie Stone, states how at the west (for north) end of the stone stands the Wart Hill, near the top of which, in May, June, and July, about midday, is seen something that shines and sparkles admirably, seen at a great distance, and hath shined more brightly before than now. He further states that the vulgar called it some enchanted carbuncle, but that he attributed it to the reflection of the sun from water sliding down the face of a smooth rock. Brand, in 1700, repeats Wallace's description, and adds that a gentleman who lived near the place told him that it shined most in the greatest drought. Sir Walter Scott makes no mention of the carbuncle in the diary of his visit to Hoy, but, in the notes to his *Pirate*, Wallace's account of it is given. He makes Norna say, "Often when watching by the Dwarfie Stone, with mine eyes fixed on the Ward Hill which rises above that gloomy valley, I have distinguished among the dark rocks that wonderful carbuncle, which gleams ruddy as a furnace, to them who view it from beneath, but has ever become invisible to him whose daring foot has scaled the precipices from which it darts its splendour." Tudor, probably founding his views on Scott, states that the carbuncle was said to be seen from close to the Dwarfie Stone in the more scarped portion of the precipitous amphitheatre (the Nowt Bield) which surrounds what is called the meadow of the Ward Hill. Like Mackaile, the writer has had recourse to the proprietor of the place, Mr. Moodie Heddle, who writes (Dec. 21st, 1895), that he has always heard that the carbuncle was seen on the east face of the Ward Hill, in such a position that it would be visible from near the Bu, or between that and Warbaster to the south. He has heard several Hoy people allude to the existence of the carbuncle, but never to any tradition. Mr. Heddle says that on several occasions, when in or near the position above mentioned, he has seen a broad, dazzling flash of white light, as if sunlight were reflected (but whitened) from a mirror, and more like a diamond than a carbuncle; he thinks it was caused by water running *spread out* over a flat slanting rock, as it was always when there was a sudden burst of sunshine, after some hours of heavy rain that he saw it, and always

about the same spot, one of the small "gills" above the South Dam. Sir Walter Scott's statement in the *Pirate*, that the carbuncle was seen from the Dwarfie Stone, is either a misinterpretation of Wallace's account (which does not say from what direction the carbuncle could be seen), or more probably a novelist's license.

If the carbuncle is a relic of sun worship, and if it was seen from Maeshowe, in Stenness, possibly Mr. Magnus Spence may be able to give it a place in his theory of sun worship in connection with Maeshowe and the Standing Stones, as recently propounded by him in the *Scottish Review* of October, 1893. From the map it will be

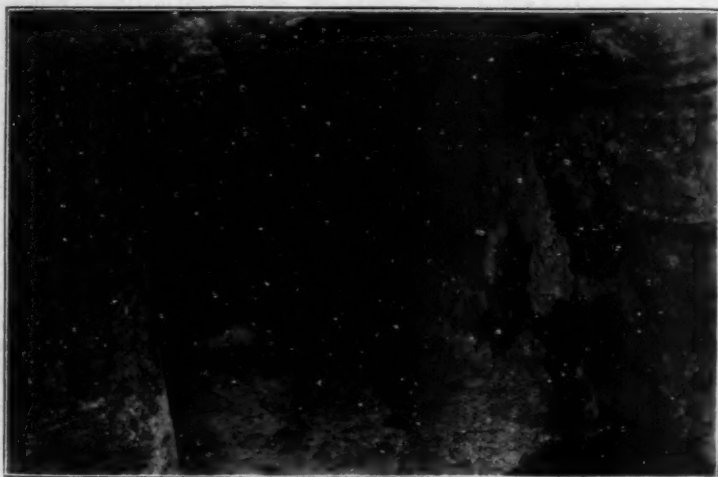


Fig. 9.—Interior View of the Dwarfie Stone looking into passage and south chamber.

(From a Photograph by Messrs. J. Valentine & Sons, of Dundee. No. 10,431.)

seen that Maeshowe is, as near as can be, directly south-west, and not far out of the line of sight of the carbuncle, and curiously enough the outlook of the long passage in Maeshowe, which is an important factor in Mr. Spence's scheme, is to the south-west.

In endeavouring to arrive at some conclusion as to the origin and age of the Dwarfie Stone, it will be as well to glance briefly at the history of Orkney, and of Hoy in particular.

There are abundant evidences in Orkney and Shetland, in the shape of remains of underground dwellings and brochs or round towers,

that these islands were inhabited in common with the north of Scotland by two distinct races prior to the Norse invasion in the ninth century. Whether these were Turanians and Picts will probably ever remain doubtful. The Irish anchorites and missionaries found their way to these islands, and as far north as Iceland, in the early centuries of Christianity, and evidently succeeded in establishing their religion, as is apparent from the dedications of churches, sculptured monuments, names of places, etc. The pagan Norse vikings began to make their appearance early in the ninth century, and before them the anchorites disappeared. By the end of that century Norway had established the Earldom of Orkney and Shetland, which lasted until 1468, when the sovereignty of these islands was pledged to the Crown of Scotland in security for part of the dowry of the Queen of James the Third, and so it remains unredeemed and undischarged to this day.

No resistance appears to have been made to the Norse invasion, a fact which leads Sir George Dasent to the conclusion that "the Northmen really found those islands empty and desolate, and that it was not before their swords that the ancient races vanished away." This seems almost incredible, as there must have been some inhabitants, however few, to preserve and perpetuate the many Celtic place-names and dedications of churches. The former inhabitants would probably have been absorbed by inter-marriage and thralldom, and possibly Christianity never entirely died out in the islands.

Let us now turn our attention to Hoy. It was here, and probably in the Uplands, and in the valley in which the Dwarfie Stone is situated, that "the legends of the North laid the scene of that endless mythical combat, where day by day the followers of Högin and Hedinn fought and fell, only to rise up at dawn next day to renew the struggle, which was to last to the day of doom. This is not the only tale which shows that to the Northmen these islands of the west were holy ground."¹ The incidents in the older form of the poem are as follows:—Hedinn, Prince of Serkland (Saracen land), wandering in the woods, met a sorceress, from whom he received a magic philtre to enable him to win the love of Hilda, Högin, the King of Denmark's daughter. He ran off with her in one of Högin's ships. Högin went in pursuit, and came up with them at the island of Hoy.

¹ Dasent.

They both landed, and a furious battle commenced. Hilda, by her enchantments, raised the slain as fast as they fell to renew the combat. The later Christian additions state that Odin cast a spell, so that they were obliged to fight without ceasing until a Christian should have the hardihood to mingle in the fray, of which Hilda was doomed to be a spectator. At last Olaf Tryggvi's son came to Orkney, and Ivar Lioni, one of his men, went into the fight, broke the spell, killed Hedinn and Högin, and bore off the prize.¹ It was at Osmondwall, a bay in Walls, that Olaf Tryggvi's son, in 995, converted the Orkney Jarl and his people to Christianity by sword-baptism. At Osmondwall is the site of the old church of St. Colme, or Columba, undoubtedly a Celtic dedication, dating prior to the Norse invasion. A stone slab, with rudely incised Celtic cross, was recently unearthed here. In 1116-26, we learn from the Saga that a man, Thorljot, lived in Rackwick, in Hoy, and among the men of mark living in Orkney, in Earl Paul Hacon's son's day, 1128, is mentioned John Wing, who dwelt in Hoy at the Upland, probably what is now known as the Bu. We find from Peterkin's Earldom rental of 1503 that the whole of the cultivated lands in Hoy (north parish) had been part of the old Earldom estate, *i.e.*, at and prior to 1468, and were boardlands or guest-quarters of the Earl, paying no skatt or land tax on that account.

Situated in a solitary and weird valley in the Upland of Hoy, the Dwarfie Stone was evidently an early object of interest to the pagan Norsemen, and may have led to Hoy being chosen as the scene of the endless battle already alluded to. Whether they found the stone closed up with the large stone or open it is impossible to tell. They may have been the first to break into it through the top—the large stone could not be easily extracted from the outside—or, more probably, like Masehowe, it had already been ransacked. In any case, whether they found it closed or open, their imagination could not fail, in accordance with their folklore, to connect it with the dwarfs, who, in their belief, lived in stones and rocks, and had the name of carrying away and immuring human beings.

Mr. Eiríker Magnússon tells me that he is not aware that Icelandic folklore has in any way dealt with the description of these stones further than mentioning them as having a door and being hollow

¹ Anderson's *Introduction to Orkneyinga Saga*, p. cxiv.

100 *The "Dwarfie Stone" of Hoy, Orkney.*

inside. The earliest record of such a dwarfie stone occurs in Ynglingtal in Heimskringla, where King Swegdir, after a drinking bout, is enticed by the dwarf into his stone, from which he never came out.

The name *Dwarfie* goes to prove the antiquity of the stone, as, according to Vigfusson, in modern Icelandic lore dwarfs disappear, but remain in local names as *Dverga-steinn*.

An echo is called, in Icelandic, *dverg-mál*, or dwarf-talk, and there is said to be a fine echo from under the Dwarfie Hamars. Then there is Trowie (Troll's) Glen to the westward of the stone. A troll or trow in old Icelandic lore is a huge creature or giant, mostly in an evil sense. Mr. Heddle states that Trowie Glen is still considered an uncanny spot, and that people will go a mile or two out of their way rather than pass it after dark. In Jamieson's Scottish Dictionary, under Hill-Trows, it is stated that the superstitious in some places endeavour to bribe the trows by leaving an offering of food for them every night, being persuaded that otherwise they would destroy the family before morning. Probably this accounts for the offerings mentioned by Dr. Clouston as being left in the Dwarfie Stone.

The whole associations of the locality are thus connected with old northern folklore. If the stone had been a hermitage, such would almost certainly have been known to the Norsemen, and we would therefore naturally look for some tradition or name to that effect. No Christian symbols of any kind have been found on the stone. The chambers are much too cramped for an abode. The large doorstone which fits the opening would, when inserted, be more of the nature of a permanent seal. The round hole in the top, which does not appear to have formed part of the original design, points to a breakage into the chambers as an easier method of entrance than the extraction of the stone door. This opening in the top is described as a breakage in the legend related by Jo. Ben in 1529, which proves that it had been so considered for a long time previously. The possibility of the excavation having been an ankerhold seems out of the question considering the locality.¹

All these considerations appear to point to the Dwarfie Stone having been originally "a sepulchre which was hewn out of a rock," with a "very great" stone for its door.

ALFRED W. JOHNSTON.

¹ For description of Ankerholds see Bloxham's *Gothic Architecture* and J. T. Micklethwaite in the *Archaeological Journal*, vol. xlv.

The "Dwarfie Stone" of Hoy, Orkney. 101

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Notes on Archæology and Kindred Subjects.

WOODEN TOILET SPOON FROM EGYPT.

(*Frontispiece.*)

THE photograph reproduced in collotype which forms the frontispiece of the present number represents a wooden toilet spoon in the collection of Egyptian antiquities bequeathed to University College, London, by the late Miss Amelia B. Edwards. It was exhibited recently at the Burlington Fine Arts Club, and whilst there Prof. Flinders Petrie very kindly got Mr. Wallis to take a photograph of it specially for the *Reliquary*. In Prof. Flinders Petrie's absence in Egypt his colleague, Mr. F. Ll. Griffith, F.S.A., has been good enough to furnish particulars as to what is known about it. The toilet spoon is of the eighteenth dynasty, and was found at Ahnas, or Heracléopolis Magna (see Naville *Ahnas*, p. 12, Egyptian Exploration Fund Memoir).

Amongst all the pretty nick-nacks which formed an essential part of the toilet apparatus of every Egyptian lady there is perhaps no article so well suited to exhibit the skill of the decorative artist as these carved spoons. The use of the spoon-shaped receptacle was to hold any one of the numerous essences, pomades, or coloured preparations that served for what the modern actress would call "make-up" to beautify the hair or complexion. Sometimes the receptacle had a cover revolving on a pin, so that it was really a box with a handle rather than a spoon. In the example illustrated a small hole will be noticed, which may have been for the pivot of the cover. The object of the handle was to enable the article to be easily taken hold of without soiling the fingers with the greasy preparations contained in the spoon. The decoration of the handle afforded plenty of scope for the wood-carver to give full play to his fancy. Sometimes the exceedingly hideous god Bes formed the principal subject, but infinitely more pleasing to the eye are the dainty female figures, with a background of Nile river plants suggesting the scene in the midst of which the infant Moses was discovered by Pharaoh's daughter. In the present case a tall and not

ungraceful Egyptian girl is represented standing in a boat and playing on a stringed musical instrument. The Nile is conventionally indicated by three fish swimming along below. The whole of the rest of the design consists of lotuses tastefully arranged and with the spaces between them pierced. The shortening of the boat to suit its length to the width of the handle, although it makes the boat look absurdly small, at the same time combines with the vertical lines of the stems of the lotuses to add to the height and dignity of the nude girl's figure. Somewhat similar designs will be found on toilet spoons illustrated in Sir Gardner Wilkinson's *Ancient Egyptians*, vol. ii., pp. 13-16, and Maspero's *Egyptian Archaeology*, p. 273.

The specimens in the British Museum collection are decidedly inferior to any of these. At a time when the taste of the English bourgeoisie and even of a large section of the upper classes is at the lowest possible ebb, it is instructive to observe how much thought and conscientious work the ancients were able to infuse into the design of the simplest objects of everyday use. The highest flight of imagination to which the artist who caters for the middle class of to-day can rise is to make a salt-cellar in the form of a coal box, or a coal box in the form of a flower vase.

INSCRIBED BRONZE FLAGON OF THE FOURTEENTH CENTURY IN THE SOUTH KENSINGTON MUSEUM.

THE bronze flagon here illustrated came from a manor house in Norfolk, and was at one time in the Robinson collection, from which it was purchased by the South Kensington Museum. It is labelled No. 217-79, and the date ascribed to it 1330 to 1350. The height is 1 ft. 3 $\frac{3}{4}$ ins., and the diameter 10 $\frac{1}{4}$ ins. This remarkably handsome flagon is interesting for several reasons: (1) as being an excellent example of bell-founders' work of the period; (2) on account of the beauty of the lettering and heraldic devices with which it is decorated; and (3) because of the inscription being in English instead of Latin or Norman-French, as is more commonly the case.

The form of the vessel is that of a jug with spout, handle, and cover. The handle is ornamented with a cable moulding, and terminates in a Gothic quatrefoil, where it joins the body of the flagon.

Both the heraldic devices and the inscriptions have been impressed on the mould in which the flagon was cast by means of movable dies or stamps, probably of wood. The application of this principle to type and paper resulted a century later in the invention of printing. The system of using stamps for repeating the same pattern on the mould of the metal

founder was employed by the makers of the leaden fonts of the twelfth century, as in the case of the one at Brookland, in Kent, where the months and signs of the zodiac are reproduced in this way.

Patterns produced by stamps are also found in bookbinders' work and on the plaster ceilings of the Renaissance period. In founders' work it survived in the cast iron tombstones of Sussex. The modern printer's devil,



Inscribed Bronze Flagon of the fourteenth century in the South Kensington Museum.

who revels in playing pranks with the letters he is setting, had his prototype in the users of stamps for impressing metal founders' moulds, as we find the same inevitable tendency to turn the stamps the wrong way up or misplace them. On the flagon we are describing, for instance, the letter S is in all cases placed sideways, thus *∞*, and the letter L upside down, thus *⌋*. Was this the result of ignorance or "pure cussedness"? *South Kensington Museum*

The heraldic devices on the flagon consist of a shield with the Royal arms surmounted by a crown, and the same crown used by itself. The Royal arms and Crown are repeated five times, twice on each side just below the rim, and once on the body of the jug below the spout. The crown by itself is also repeated five times, twice on each side of the bottom of the neck of the jug, and once over the letter O of the word GOD at the commencement of the inscription.

The inscription is in Lombardic capitals of the fourteenth century, in three horizontal lines running round the upper half of the body of the jug. It reads thus :—

† GODDIS	GRATIA	BÆ	IN	THIS
STOND	VTTIR	FROM	AMEN	PLAIA
ON	IVST	DOMA	NARA	THA
				FYRA
				AND
				LAT

"God's grace be in this place. Amen. Stand away from the fire and let one just come near."



The Royal Arms on Bronze Flagon in the South Kensington Museum.

It will be noticed that the words of the sentence are not all placed in their proper order so as to read consecutively, but sudden jumps are made from one line to the other. This irregularity may be due to the same ignorance, carelessness, or caprice which caused some of the letters to be turned the wrong way.

The letters are beautifully formed, and produce a fine decorative effect. This flagon is given as a specimen of ornamental lettering applied to metal work in E. F. Strange's recently published "Alphabets" (George Bell and Sons). The only letters which do not occur in the inscription are K P Q W X Z.

The quaint archaic wording of the inscription affords a rare instance of the use of the vernacular at this period for such a purpose. Inscribed

metal objects of the fourteenth century are not common, and when they are found the language used is generally either Latin or Norman-French, as in the following:—

A mortar in the York Museum,¹ formerly belonging to the infirmary of the Abbey of St. Mary, inscribed in two horizontal lines, one round the rim, and the other round the base:—

MORTARIUM SANCTI IOHANNIS
 EVANGELISTÆ DE INFIRMARIIS
 BEATÆ MARIÆ EBOR.
 FRATER WILLÆLMVS DE TORTHORP
 ME FECIT A.D. MCCCXVIII.

A three-legged bucket or situla in Wreay Church,² Cumberland, inscribed:—

+ PRIUS PVR LALME G GLANVILLE

A three-legged ewer found in Gower,³ Glamorganshire, inscribed in two horizontal lines:—

IG SVI LWR GILBERT
 KI MEMBLART MTL I DDBERT

A three-legged ewer⁴ inscribed in one horizontal line:—

VENS LVR

There is exhibited in the Mediæval Room at the British Museum a bronze flagon presented by Sir A. Wollaston Franks, K.C.B., which is believed to have come from Berkeley Castle. It is inscribed in one horizontal line—

STI WEL OR PES.

The Editor will be glad to hear of any further examples of the same kind.

J. ROMILLY ALLEN.

¹ Catalogue of York Museum.

² Scott's *Antiquarian Gleanings in the North of England*, plate 14, fig. 5.

³ *Proc. Soc. Ant., Lond.*, 2nd series, vol. iii., p. 199.

⁴ *Archæological Journal*, vol. xiii., p. 74.

SURVIVALS.

A SHORT time since, I paid a visit to the Royal Porcelain Works at Worcester, where the visitor is shown the various interesting stages of manufacture in a most lucid and explanatory way. Two things among the many points of interest struck me as having a special attraction to an ethnologist: one being the use of exceedingly roughly hewn stones employed in grinding the ingredients for the porcelain, and the other was the use of a stone implement for burnishing the gold decoration after the firing had



Fig. 1.—Pottery Burnisher used at Royal Worcester Porcelain Works.
Scale, $\frac{2}{3}$ actual size.

been done. These little implements were of two kinds—the one being a pencil-like point of “agate,” and the other a blunt point of “blood-stone.” These were mounted respectively in a brass handle terminating in a wooden base. (See fig. 1.)

These objects were particularly interesting to me, inasmuch as I have in my collection a pottery smoother made of a rolled pebble of quartzite rubbed down at either end to a point, very similar to our Worcester example. This implement is of considerable age, and was used by the Zuni Indians of North America. (See fig. 2.)



Fig. 2.—Pottery Smoother used by Zuni Indians, North America. Scale, $\frac{2}{3}$ actual size.

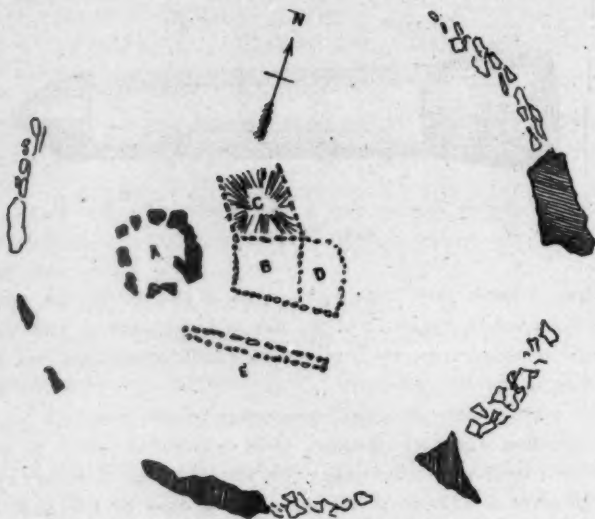
The selection of a silicate stone in both cases is very interesting, as also is the shaping of the “business” end of the implement. In the midst of our advanced (?) civilization, how frequently we find the use of our appliance invented and thought out by the “primeval savage!”

E. LOVETT.

EXPLORATION OF CARN BRÊ (II.).

ONE of the many interesting circumstances connected with the recent exploration of the pre-historic hill fortress of Carn Brê in the county of Cornwall, was the discovery of the remains of dwellings existing between the granite boulders on the eastern summit.

Mr. Thurstan Peter's little daughter, an enthusiastic explorer of Carn Brê, insisted that there were such dwellings, and could not be satisfied until



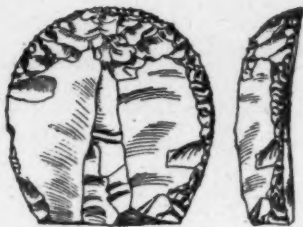
Circle No. xi.

Scale, $\frac{1}{8}$ of an inch to 1 foot. Stones not shaded are on end. Shaded stones flat.

- A. Platform 11 inches above floor.
- B. Space enclosed by small stones on floor level.
- C. Concave hearth in sub-soil hardened by fire, contained charcoal. The cavity is 7 inches deep at edge and $9\frac{1}{2}$ inches in centre.
- D. Platform 10 inches above floor level.
- E. Double row of stones 8 inches high.

some digging had been performed between them. The keen perception of this youthful archæologist was amply confirmed, for amongst the boulders were found remains of huts of various shapes, the floors of which on exploration yielded rich finds of flint implements and pottery. The boulders formed the walls of the huts, supplemented with courses of dry built stones. In some instances the boulders seemed to have been partly slewed round so as to be more suitable for walling.

Very little could be seen which indicated that they were the sites of habitations until the floors were exposed, disclosing hearths, charcoal, fragments of domestic pottery, implements, and weapons of flint, with cores and chips of the same material in profusion. Some of the pottery was hand made, and some again appeared to have been turned with the assistance of the wheel.



Scraper from Circle No. xxv., actual size.

None of the hut circles on Carn Brê could be said to be well preserved. One of the best was No. xi., which lies a few yards inside the ruined entrance into the settlement on the south side. This had the remains of raised platforms close to the fireplace, and these might have served for seats or tables.



Celt from Circle No. xxv., about $\frac{1}{2}$ actual size.

The floor of hut No. xxv. yielded twelve beautifully made scrapers of flint. They were found lying in a heap and apparently as new and unused as when they left their makers' hands. This is curious and seems to favour the idea that they must have been left in a hurry, for as stone implements they must have possessed some considerable value. A celt of Lizard diallage stone, much corroded, four and a half inches long, with a cutting edge of two inches, was also found in the floor of this hut.

Appliances for grinding grain were conspicuous by their absence over the whole area explored. The only definite grinder was found in hut No. lxi., and consisted of the top half of a quern; but many pebbles suitable for pounding were found, and some of these showed signs of use. A curious pebble of grit with both ends rubbed down was found in hut No. xvii. This tiny muller is an inch long and five-eighths in diameter. It has been suggested that it may have been used for grinding down pigments.

The following is a summary of objects found in the course of the extensive exploration undertaken and so ably carried out by Mr. Thurstan Peter:—

Flint implements and weapons—scrapers, knives, spears, and arrow heads.

Cores, flakes, and chips in great profusion.

Upper portion of quern, pebbles for pounding or bruising, and a small muller.



Small Muller from Circle No. xvii., actual size.

Small sparry pebbles—use unknown (large numbers of these are also found in the Dartmoor hut circles).

Spindle-whorls of stone and pottery.

One perfect stone celt and many broken, all of Lizard diallage stone.

A perforated disc of slate, four inches in diameter, and nearly an inch thick—hole drilled from each side.

Fragments of plain pottery, both hand and wheel made.

A bronze ring, seven-eighths of an inch internal diameter. The period of this is doubtful, for it is of a form that may belong to any age. It appears to appertain more to the late Celtic or Roman rather than to the Bronze Period.

A silver denarius of Vespasian, A.D. 70, found in the floor of hut No. xx.

Previous recorded finds on Carn Brê consist of coins and some bronze celts in 1744, and five years later a considerable number of gold coins of the British Kings contemporary with the early Roman Emperors. There is therefore some evidence beyond the scope of the recent exploration that the hill was frequented during the early metal period, and this has been more or less continuous and important down to the present time.

In reviewing the results of the recent exploration there seems little reason to doubt that the hill was largely resorted to as a refuge in Neolithic times. There is abundant evidence of this in the stone implements, weapons, and hand made pottery. As the floors of the same huts with Neolithic evidence yielded fragments of wheel made pottery, the presumption is that some advance in culture must have been made by subsequent dwellers in the huts, unless this be an instance of the overlapping of the use of rude and more highly finished pottery, or that men living in a Neolithic state in Cornwall possessed some knowledge of the potter's wheel.

The almost entire absence of bronze *may* be accounted for by its intrinsic value and liability to find its way to the melting pot, but the absolute dearth of any objects of iron or the oxidised remains of same in the hut circles, seems to indicate that the limit of the use of these primitive huts was reached before the iron age commenced in Cornwall. We have no knowledge when the use of iron began, but as the Cornish were expert winners of and workers in metals from an early period, it was probably not after the period when the rest of Britain had adopted the superior and more durable metal.

It is a matter of congratulation that through the initiative of Mr. Thurstan Peter, the whole of the finds have been presented by Mr. Bassett, the owner of Carn Brê, to the Museum of the Royal Institution of Cornwall at Truro.

ROBERT BURNARD.

ROMAN TILE MARKED WITH A CROSS FOUND AT IWERNE.

GENERAL PITT RIVERS writes to the Editor as follows in a letter dated September 3rd, 1895:—

"I send a photograph (here reproduced) of an incised mark on the upper side of a Roman tegula that was found a short time ago on my property at Iwerne (Iberrum), with other remains, probably of a Roman house of some kind. The tile is now in my museum at Farnham, Dorset. I think the incised mark is undoubtedly intended for the very early Christian symbol—a cross within a circle—of which there are other examples in the south-west of England. You will observe how quickly and roughly it has been marked with the point of the finger on the moist clay, the ends or the arms of the cross over-shooting the circle, which is against its being intended for an ornament. It is an unlikely place also for an ornament to occur, on the top of a roof where it could not be seen. It seems more probable that the symbol was roughly marked by some Christian as a charm; if so, it is the only example of this on a Roman tile which has

yet been found in this country, and I thought you might like to have an illustration of it for the *Reliquary*. It is interesting to observe the impression of a dog's paw, to the right of the cross, evidently made whilst the tile was in a plastic state."



Roman Tile found at Iwerne.

We are extremely obliged to General Pitt Rivers for enabling us to illustrate this unique relic of Romano-British Christianity. It adds one more example to the very limited number of objects bearing Christian symbols which have been found in Great Britain (see Haddan and Stubbs' *Councils and Ecclesiastical Documents*).

AN EARLY CROSS AT LONAN, ISLE OF MAN.

A FEW years ago I was searching for the remains of a lost cross which had been mentioned by Kinnebrook, *Etchings of the Runic Monuments in the Isle of Man*, 1841 (fig. 14), who saw it "in the plantation at Glenroy," near Laxey, and by Cumming, *Runic Remains in the Isle of Man*, 1857 (fig. 40). A new barn was being built, and in pulling down the old one the smaller of the missing fragments was brought to light. The larger piece I at length

traced to an adjoining farm, where it had been utilised as a lintel to a cowshed. A third fragment I learnt had been built into a large reservoir, in Glenroy, and it is scarcely likely to be found again. Last September



Cross at Lonan, Isle of Man.

(From a photograph by Mr. T. Keig, Douglas, Isle of Man.)

I succeeded in obtaining the consent of the proprietors of the respective farms to have the lintel replaced by a plain stone, and both these pieces removed to the old Parish Church of Lonan.

The cross has not been correctly figured before, and as it bears a peculiar device on the shaft, the like of which does not occur elsewhere in the island, and I should be glad of suggestions as to the origin, meaning, and intention of this, I have ventured to bring the matter under the notice of readers of the *Reliquary and Illustrated Archæologist*.

The same day that I removed the pieces I had plaster casts taken of them by Mr. T. H. Royston for my series of Manks casts, and Mr. Keig was good enough to come specially and take the excellent photograph which is here reproduced.

The slab, which is of slate from Garwick, south of Laxey Bay, when complete, must have measured about 6 ft. 2½ ins. by 2 ft. 9 ins. across the head, and 4½ ins. thick. It bears in relief on one face a shafted cross, the limbs connected by a circle, the shaft bordered by a bead terminating at the end in incurved volutes of two convolutions recurving outwards again to form the bead bordering the edge of the slab. On the right of the shaft, however, the sculptor has missed the line, and the intended volute is resolved into concentric circles. Between these volutes, above and below, is a triangular device of three pellets.

Incurved volutes are infrequent, they occur on a cross at S. Dogmael's, Wales (Westwood, *Lap. Wall.*, plate 61), and on two early stones at Clonmacnois, Ireland (Petrie, *Christian Inscriptions*, figs. 58 and 106).

On the shaft, immediately below the circle connecting the limbs, is a sunken panel, about 12 ins. long, which bears a device consisting of a circular, cup-shaped hollow, the ring of which terminates in a long shaft with double bead and spiral ending. The upper corners of the panel and points of junction of ring and shaft are occupied by pellets.

At first sight this looks in outline like the Mirror symbol, but the peculiar cup-like manner in which the centre is hollowed out does not seem to suggest a Mirror, nor do I know what else it can be intended for. It is certainly not a mere meaningless pattern, and the artist must have had some definite object in carving it here. We usually find the Mirror represented merely by an incised outline, but the Editor has called my attention to an instance, figured in Stuart's *Sculptured Stones of Scotland*, vol. i. cvi., on the Rosemarkie stone, Ross-shire, which more nearly resembles the one under consideration.

[The symbols on the Rosemarkie stone are of very unusual form. There is only one comb (with teeth on both sides), but there are two mirrors, or, at all events, mirror-like objects. One of these is certainly not shown with the reflecting face of the mirror towards the spectator, because it has a small raised boss in the middle of the circular part, surrounded by a recessed ring. It may be either intended for a mirror, showing the back, or

possibly for the case of the other mirror, as it is the larger of the two. The object on the Lonan cross may be a shallow pan, or patella, such as was found in a "Late-Celtic" cemetery at Aylesford, in Kent (*Archæologia*, vol. lii., p. 64). A very remarkable illustration of Ezekiel's dream (Ezekiel iv. 1-3) from a tenth century Bible (No. 6 t. iii.) in the National Library at Paris is given in Viollet le Duc's *Dictionary of Architecture* (vol. i., article "Architecture"), in which the "iron pan" is of exactly the same shape as the object represented on the Lonan cross. It is combined with the "battering-ram" which was used in the siege of Jerusalem in Ezekiel's dream.—ED.]

P. M. C. KERMODE.

Ramsey, Isle of Man,
February, 1896.

THE NEW RACE IN EGYPT.

FOREMOST amongst the archæological sensations of last season was the discovery, by Professor Flinders Petrie, of an entirely new and hitherto unsuspected race in Egypt, whose civilization had nothing in common with that of the ancient peoples previously known to the scientific world as inhabiting the Nile valley. It will naturally be asked how it is that

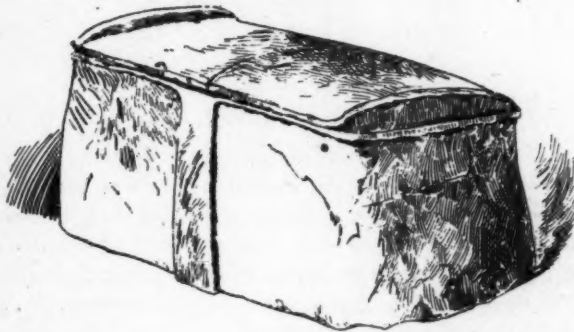


Fig. 1.—Earthenware Coffin of the New Race.

Prof. Petrie is able to make entirely new discoveries of such an astonishing nature in a country the tombs of which have been ransacked for valuables during the last two or three thousand years. The explanation is simple. The ordinary curio hunter, or the seeker after museum specimens (who is hardly a shade more enlightened), when he happens to come across anything in his diggings which is not of the familiar Egyptian type, he immediately throws it aside as a waste product. With the really scientific

explorer, seeking for the facts that things reveal rather than for objects of mere intrinsic value in themselves, it is different. Antiquities belonging to the New Race have been found before in Egypt, but, not being like the usual relics which collectors are on the look out for, they have hitherto failed to attract any attention. Prof. Petrie, with greater sagacity, was at once struck with the extreme significance of the fact that in some of the tombs opened by him last year there was no trace of anything characteristically Egyptian. This put him on the *qui vive*, and led to his being able to demonstrate the existence of the New Race. An exhibition of the collections was held at the University College, London, from July 1st to 27th, 1895, and Prof. Petrie lectured on the subject before the Royal Society of Edinburgh in April, and before the British Association at Ipswich in September.

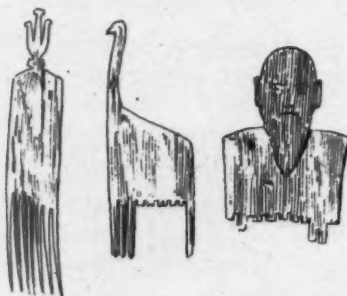


Fig. 2.—Ivory Combs of the New Race.

The site of the discovery of the remains of the New Race, consisting of nearly 2,000 graves and two small towns, is situated along the desert edge between Ballas and Nagada, about thirty miles north of Thebes on the western side. The graves were dug in the shoals of gravel in the dry watercourses, and never in the rock. The graves were square pits averaging 6 ft. long, by 4 ft. wide, by 5 ft. deep. The body was, in all cases, buried in a contracted position, lying on the left side with the head to the south and the face to the west. The grave goods comprised jars for containing drink, ashes, and scented fat, slate palettes, and brown jasper pebbles for grinding malachite face paint, stores of malachite and galena in bags placed in the hands, and beads on the neck, wrists, fingers, and ankles.

The graves were in some cases intruded into Egyptian tombs of the Fourth Dynasty below, and covered by burials of the Twelfth Dynasty above, thus fixing the period to which they belonged. Prof. Petrie therefore thinks that the New Race must be the people who overthrew the first

great civilization of Egypt at the end of the Sixth Dynasty, and were in turn overthrown by the Eleventh Dynasty at Thebes.

The physiognomy of the New Race must have been fine and powerful, without any trace of negro prognathism. A very prominent aquiline nose and a long pointed beard (fig. 2) indicate an affinity to the Lybian and Amorite type. Their stature was remarkable, some being over six feet high, and the great development of their legs points to their having been a hill people.

Although the New Race were acquainted with the use of copper (fig. 3), a large number of flint implements were obtained from the sites they occupied, of the most exquisite beauty and finish, exhibiting that wavy

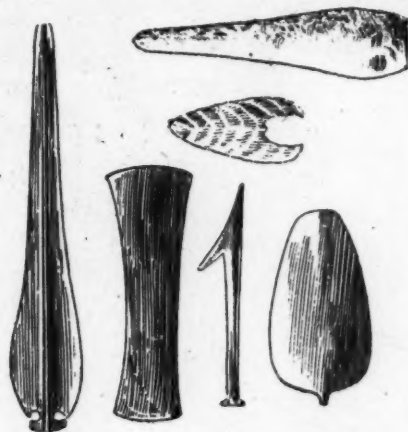


Fig. 3.—Stone and Copper Implements of the New Race.

surface flaking which is only found where the skill of the artificer in stone has attained the high water-mark of excellence. It would be difficult to match the flint knives of the New Race by even the choicest specimens from Scandinavia.

Several varieties of pottery were found, all hand-made, and showing no trace of any knowledge of turning on a wheel, notwithstanding which the forms were remarkable for the regularity and beauty of their contours. Some of the vases were red or black, with a glossy polished surface, whilst others were much ruder. The figured ware, with representations of many-oared boats, lines of trees, ostriches, animals, and men, gives a vivid picture of the surroundings at the time when these early art-potters lived. A number of the jars had the peculiar wavy handles (see fig. 4) which

are also characteristic of the Amorite pottery found in Palestine. In addition to the fictile ware, a large series of pretty little stone vases, with small loop handles, was discovered, made out of breccia, limestone, basalt, syenite, porphyry, alabaster, and other decorative materials. These also were entirely hand-made, and not turned on a lathe.

The slate palettes (fig. 5) on which the green malachite was ground up for face paint, by means of pebbles of brown jasper, generally lay near the head of the body, and are made in all sorts of forms of fish, birds, and animals, including the gazelle, ibex, elephant, etc.

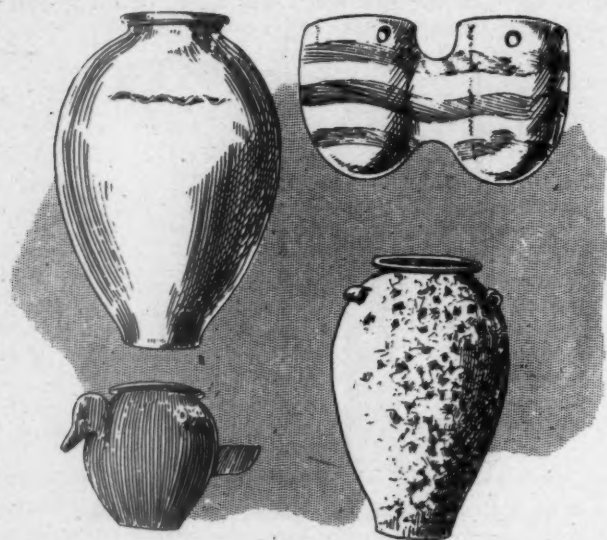


Fig. 4.—Vases of Porphyry and Pottery of the New Race.

In a case in the British Museum, on the right-hand side of the entrance to the Mediæval Room, will be noticed a series of stone implements, etc., forming part of the Christy collection, which includes a number of these slate palettes brought from Egypt long before the existence of the New Race was suspected. They are still labelled "objects of unknown use," but fresh discoveries nowadays follow so quickly one on the heels of another that it would hardly be possible to keep the National Museum up to date without a large addition to the present staff.

The group of objects shown on fig. 6 were probably intended for playing a game similar to the modern nine-pins. They were found in a child's grave,

and consisted of nine pieces or pins, four syenite balls not much bigger than peas to play with, and three little blocks of stone to form a trilithon, the ancestor of the croquet hoop.

Ivory was largely used by the New Race for hairpins, combs, spoons, etc. The comb shown on fig. 2 is interesting as showing the physiognomy of the people.

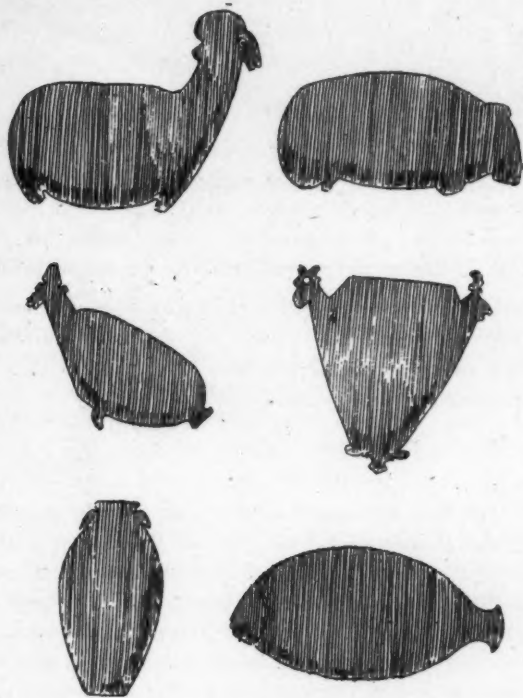


Fig. 5.—Palettes used for grinding Malachite Paint.

One lesson to be learnt from the remains of the New Race is what a high pitch manual dexterity and precision of eye may be attained side by side with a mechanical ingenuity which is at so low a level that the use of the lathe and the potter's wheel was quite unknown, and with an intellectual culture not yet advanced to that stage when even the rudest form of picture writing had been invented, the only approximation to writing

being what seemed to be intended for owner's marks scratched on objects in a few instances.

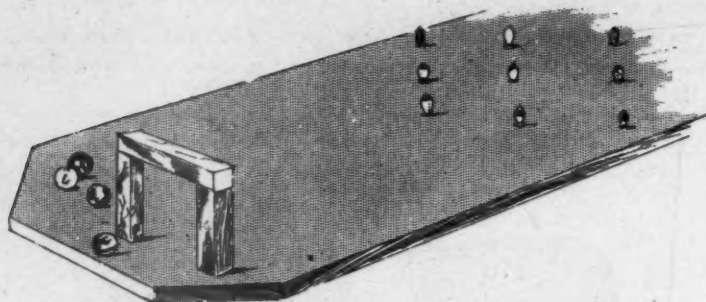


Fig. 6.—Board for playing game of Nine-pins found in a child's coffin.

DISCOVERIES AT EASTERTON OF ROSEISLE.

The following letter was written by Canon Greenwell to Mr. Hugh W. Young, in reference to his note in the last number of the *Reliquary* on the discoveries recently made at Easterton of Roseisle. Canon Greenwell has kindly consented to its publication :—

“DURHAM,

“JANUARY 3RD, 1896.

“MY DEAR SIR,

“I have just read with much interest your account of excavations at Roseisle, in the *Reliquary*. I hope you will excuse my making a few remarks upon what you say. The pottery you found bears much resemblance to that which I have reason to believe belongs to the Stone Age. I opened a chamber in a large cairn at Kilmartin, in Argyleshire, and there, associated with burnt interments and flint implements, arrow points, etc., was an urn, round bottomed, of a dark coloured pottery, and ornamented with a fluted pattern, thin in fabric, and well baked. The late Dr. Angus Smith found a very similar urn in a chamber within a cairn, also in Argyleshire. Such places of interment-chambers, I have no doubt, belong to the Stone Age before the knowledge of metal had occurred, burial in cists belonging to the Bronze Age. In the case of the Kilmartin cairn there was a valuable illustration of this. The original interments of burial after cremation were quite intact, but at the end of the chamber, upon the layer of earth, etc., within which were the burnt bones, flints and urn, a cist had been constructed. This had been rifled at some time or another, but there still remained a great part of the bones of an unburnt body, and nearly the whole of a

very beautifully ornamented 'Drinking Cup,' a most characteristic vessel of the Bronze Period.

"In the pits you found were no remains of burnt bones, which makes me doubt if a burial after cremation had ever occurred there. Among the very large number of cremated bodies I have exhumed, I never found, however complete the burning of the body had been, where there were not sufficient remains, sometimes in most minute fragments, to identify the presence of bones. What these pits were intended for I have no theory to propose. What you must do to settle this is to make further excavations, which I hope may result in bringing more evidence to light upon a very dark period of our history.

"I have also to make another objection to your conclusions, which I hope you will not think an unreasonable one. You appear to regard the Symbol Stones and the pits, whatever they may have been, as belonging to the same people, and, I suppose, as belonging almost to the same time. But if you believe the pits are remains of the Stone Age, then I must join issue with you, for the Symbol Stones must, I think, be classed to the time when iron had been in use and for probably some considerable time, and, therefore, the two periods must have been separated by many hundreds, if not thousands of years. I must have seen the site some years ago when my old friend, Mr. Archibald H. Dunbar, and I, visited from Duffus most of the places of archæological interest in the locality.

"I hope you will excuse a brother archæologist inflicting this long letter upon you.—Yours faithfully, W. GREENWELL."

Notices of New Publications.

"RAMBLES AND STUDIES IN BOSNIA, HERZEGOVINA, AND DALMATIA," by R. MUNRO, M.D. (William Blackwood & Sons), is mainly devoted to an account of a trip made in August, 1894, to attend the Congress of Archæologists and Anthropologists held in Sarajevo. Those of our readers who were previously acquainted with Dr. Munro as the author of the "Lake Dwellings of Europe," and as one of the energetic secretaries of the Society of Antiquaries of Scotland, will perhaps be somewhat surprised to find him on the present occasion appearing in the dual rôle of globe-trotter and archæologist. He informs us in his Preface, that—

"The *raison d'être* of the book is to give an abbreviated account of the attractions—scenic, social, and scientific—of a portion of the Balkan peninsula, which, till lately, was almost inaccessible and unknown to the people of Western Europe. On the success or failure

of my efforts to combine the popular and scientific elements, probably, hangs its fate. From the current opinion that archaeology is a dry, uninteresting study, and incompatible with the gay and pleasurable side of life, I dissent *in toto*. I have not found it so; on the contrary, in its pursuit I have come across episodes, incidents, and phases of actual life unequalled, for genuine humour, by any of the most lively magazines."

Dr. Munro's is not the first attempt that has been made to combine the study of antiquities with social enjoyment. A few years ago one of our leading archaeological societies devoted nearly two hours to a champagne luncheon in the banqueting hall at Caerphilly Castle, given by their noble president, leaving a bare fifteen minutes to perambulate the ruins of the most perfect and extensive example of mediæval military architecture now remaining in Wales. The same society on another occasion omitted Llandaff Cathedral from their programme to enable the members to attend a garden party in the neighbourhood of Cardiff. Yet the uninitiated still persist in taking archaeologists seriously, and seem to think that the dryness of their favourite pursuit quite prevents their ever having what is expressively called in slang phraseology "a high old time." Far be it from us to suggest that Dr. Munro enjoyed himself unduly whilst on his trip to the Balkans, or even allowed the pleasures of the table to interfere with his scientific investigations, but he evidently wishes his book to be read and appreciated by others than mere archaeologists, as no doubt it will be.

The beauty of the scenery of Bosnia-Herzegovina is done ample justice to, both by the author's graphic descriptions, and by the admirable series of photographic views with which the text is interspersed. He waxes quite enthusiastic in singing the praises of Sarajevo, of which he says:—

"I have seen many cities renowned for their beauty—Damascus and Jerusalem, Cairo and Constantinople, the Venice of the North and the Venice of the South—but none of these excited within me such admiration as Sarajevo."

The illustrations of Travnik with its picturesque houses and pointed minarets, the town of Jajce with one of the finest waterfalls in Europe in the foreground, and the exquisite lake scenery of Jezero on the Pliva, show what a splendid treat is in store for the artist or tourist who contemplates visiting a paradise which has been so long shut off from civilization.

Dr. Munro was one of twenty-six distinguished archaeologists of European celebrity who were invited to attend the Congress at Sarajevo. Such names as Hampel of Buda-Pest, Montelius of Stockholm, Mortillet and Reinach of Paris, Pigorini of Rome, Virchow of Berlin, and several others, are a guarantee of the scientific value of the discussions upon the various ancient sites which were inspected during the excursions in the neighbourhood. Of these by far the most interesting was the visit to the Neolithic Settlement of Butmir, near Ilidze, twelve kilometres west of Sarajevo, in the middle of a fertile plain forming the bottom of a wide basin surrounded by hills.

The traces of the human occupancy of the site were first discovered whilst digging the foundations for some Government model farm buildings in 1893. Since then Mr. Radimsky, who has superintended the explorations, has collected over 5,000 implements of stone. The terra-cotta idols and fragments of hand-made pottery ornamented with spiral patterns found in association with the relics of Neolithic culture are of exceptional interest. Opinions differed very considerably amongst the assembled archaeologists, both as to the character and age of the station at Butmir. Whilst Professor Pigorini and Dr. Munro held that it had been a pile-structure analogous to the *terramara* deposits of the Po valley, Mr. Radimsky and the remaining members of the Congress inclined to the view that it had been an ordinary land settlement. Then again with regard to the character and age of the relics, M. Reinach said that:—

"Nothing he had seen at Butmir emanated from Egypt, Babylon, or Phœnicia, and he believed that whatever technical or artistic skill the people of this station displayed, was entirely due to an indigenous European civilization."

Dr. Montelius

"Considered the settlement to belong to the Stone Age, although it was not customary to find spiral ornamentation in stations of this period in Europe."

Mr. Szombathy, on the other hand,

"Thought pottery more important in determining age than stone or metal objects. The figurines were like those from Amorgos in the Ægean Sea. The spirals, as well as several other ornaments, he believed to have been brought originally from Egypt, and to have extended in the course of time as far as Scandinavia. He could not admit the high antiquity assigned to Butmir by Dr. Montelius, and would not place it beyond the Mycænean period."

It will be seen from the discussion which took place what an important bearing the discoveries at Butmir have in modifying the previously accepted ideas with regard to age and origin of spiral forms of decoration in Europe. It is gratifying to learn that the Government of Bosnia-Herzegovina has just issued a magnificently illustrated monograph on the station at Butmir, under the direction of Dr. Moriz Hoernes and Mr. Berghauptmann Radimsky. By a careful study of this work, English archaeologists will be enabled to enlarge their views of the culture of the Neolithic period.

On his return journey from Sarajevo, Dr. Munro investigated the remains of Diocletian's Palace at Spalato, the ancient Roman city of Salona lying four miles to the north-east, and the early Christian basilica and cemetery of Manasterine just outside its walls on the north side. Dr. Munro's description of the discoveries at Manasterine gives a most vivid picture of the conditions under which the early Christians lived and died immediately before and after the Diocletian persecution. About A.D. 100, a rich Christian

citizen of Salona named Lucius Ulpus allowed his co-religionists to be buried in the grounds of his private villa outside the city. The sanctity of the place was greatly increased by its receiving the last remains of SS. Anastasius and Domnius, who suffered martyrdom in A.D. 299 and 382



Chalice of Tassilo at Kremsmünster, A.D. 777.

respectively. Small commemorative chapels were built over their graves, and the number of burials of persons who were anxious that their last resting-place should be near that of the holy martyrs increased enormously. Finally, in the sixth century, a large basilican church was built on the site.

This was destroyed when Salona was captured by the Croats in A.D. 639, and the remains lay undisturbed until they were brought to light by the archaeological explorations of the present century. The structures and monuments now exposed to view show the three successive stages of development, which are a faithful reflection of the life of the period: (1) The stage when the site was a peaceful burial place in the garden of a Roman villa; (2) when worship began in the small basilicas erected over the tombs of the martyrs, and (3) when the great church arose with all its splendour of marble columns and mosaic decoration. As another indication of the spread of Christianity in this part of Dalmatia in early times, we must not omit to mention the Baptistry at Salona, which contains a fine mosaic of the sixth century representing a pair of stags drinking from a two handled vase. The inscription, which is taken from Psalm xlii., "*Sicut cervus desiderat ad fontes, etc.*," also occurs on a Saxon font in England, at Potterne, Wilts.

Dr. Munro airs his views on the origin of interlaced work, *apropos* of the sculptured slabs found near Knin. As an example of the art of the same kind, he gives an illustration of the splendidly ornamented chalice given to the monastery of Kremsmünster by Duke Tassilo in A.D. 777. The style of the decoration is certainly not Italian, and shows distinct Irish or Saxon influence. We are enabled to reproduce this by the courtesy of the Publishers.

Staunch Protestants will learn with unfeigned astonishment that their tenets were anticipated by the Bogomiles, who are elsewhere described by Dr. Munro as comparatively harmless devil worshippers.

We should not be doing our duty if we did not protest most strongly against the absence of an index at the end of the volume. Such an omission is quite unpardonable, and we hope will be made good in a second edition.

An illustration is given of the sculptured stone at St. Madoes in Perthshire, to show the character of the interlaced work as compared with that found in Italy. The block has been borrowed from the "Proceedings of the Society of Antiquaries of Scotland," but the scale and the signature of the wretched scribe who drew it have been ruthlessly cut away.

Notwithstanding these shortcomings, Dr. Munro has succeeded in producing one of the best books of the season. It will, no doubt, convert many globe-trotters into archaeologists, though not too serious ones we hope.

"A HISTORY OF DEVONSHIRE," by R. R. WORTH (cheap edition) (Elliot Stock). As the original edition of this work was noticed at length when it first appeared, it is not now necessary to do more than to welcome its

appearance in a somewhat cheaper guise. Mr. Worth has put together in a readable form a variety of interesting information that centres round the different towns and larger villages of a most interesting county, but gives evidence of very little, if any, original research. In the "Introductory Note" to the first edition occurs the following sentence:—"While presenting, therefore, what it is hoped will be found an accurate statement of the present position of historical inquiry in Devon, the need of further investigation is fully recognised by the writer, with the certainty that much still accepted as historical must, sooner or later, be set aside by a better informed and more searching criticism." Some years have elapsed since this was written, and much of primary importance has come to light with regard to Devon, and yet, unless we are much mistaken, the new edition is an exact reproduction of the original.

"EVOLUTION IN ART," by Professor A. C. HADDON—Contemporary Science Series—(Walter Scott, Limited) is a not altogether unsuccessful attempt to apply the methods of the biologist to the study of the life-histories of designs in the three stages of birth, growth, and death. The author is of opinion that

"The artistic expression of a highly civilised community is a very complex matter, and its complete unravelment would be an exceedingly difficult and, perhaps, impossible task."

He therefore directs his energies almost exclusively to investigating the principles underlying the art of savage peoples, where the conditions are of a very much more simple character. Even with this limitation, Professor Haddon is quite aware that

"It would be absurd to endeavour to make the evolution of decorative art run on all fours with that of animals, as there are certain art forms which have no parallel in zoology ;"

and he also further points out that

"One distinction between the evolution of animals and that of patterns must not be lost sight of: in the former the survival of the fittest appears to be mainly due to an elimination of the un-fittest, whereas in the latter there is a certain amount of conscious selection."

But in spite of these disclaimers, the theory of evolution is made to explain the origin, development, and extinction of nearly every known ornamental pattern.

Once admit that savages are incapable of deliberately inventing a new design, and that all their artistic expressions are the result of pre-existing visual impressions, and the rest follows easily. But is this the case? The evidence of the carved bones and implements from the cave deposits of the palæolithic period in France go to show that purely conventional geometrical patterns existed from the very first, side by side with realistic representations of natural objects. That is to say, a perception of space

relations has always been present in the human mind, and led in the earliest ages to the pleasurable exercise of the ingenuity in arranging things in a definite position with regard to each other, and puzzling over the number of possible arrangements of lines and figures subject to the limitations imposed by the properties of space. The chief defect of Professor Haddon's book is, that he wholly ignores the geometric origin of pattern making. On the other hand, it must be candidly admitted that many forms of savage ornament which to a modern European suggest a purely geometrical origin are conclusively shown to be representations of natural objects, either degraded by successive copyings, or so highly conventionalised for purposes of symbolism, that the primary signification of the various elements of the design have become completely obscured. The magic patterns engraved on bamboo combs and other objects by the Semang of East Malacca afford some extremely interesting instances in point. Hence we are not surprised to find Professor Haddon insisting on the importance of collecting information from savages, whenever possible, as to the exact meaning which they attach to the devices they use for purposes of decoration. The Smithsonian Institute of Washington, U.S., has done a great deal in this direction, but how many private collectors of "curios," or even museum curators, in this country have attempted to find out anything about the native beliefs of which the ornament is the outcome?

Professor Haddon's intimate knowledge of the art and ethnology of New Guinea enables him to speak with authority of the evolution of patterns in this special geographical area, and he uses the experience he has there gained for elucidating the tendencies of the evolution of decorative art elsewhere. His book contains an admirable summary of the conclusions arrived at by the leading authorities on ornament, amongst whom may be mentioned Sir John Evans, General Pitt Rivers, Mr. H. Balfour, Dr. H. Stolpe, Dr. H. Colley March, Mr. Goodyear, Mr. C. H. Read, Mr. F. H. Cushing, Count Goblet d'Alviella, Dr. E. Bonavia, Mr. G. Coffey, and Mr. W. H. Holmes. Perhaps the author has been induced to quote rather too diffusely from these writers; but as many of the works are not easily accessible to the general reader, this will be "accounted to him for righteousness" by a large section of the public. It is to be regretted, however, that he has not only adopted a large number of unnecessarily uncouth terms invented by Dr. Colley March, but has added others of his own, as in the following passage:—

"To speak somewhat figuratively, heteromorphism is a sort of disease that may attack the skeuomorph or the biomorph, whereas the final term of the life-history of the biomorph is, so to speak, senile decay; the result, heteromorphismis, a teratological transformation."

Again, in another place, physicomorphs are spoken of, which are suggestive

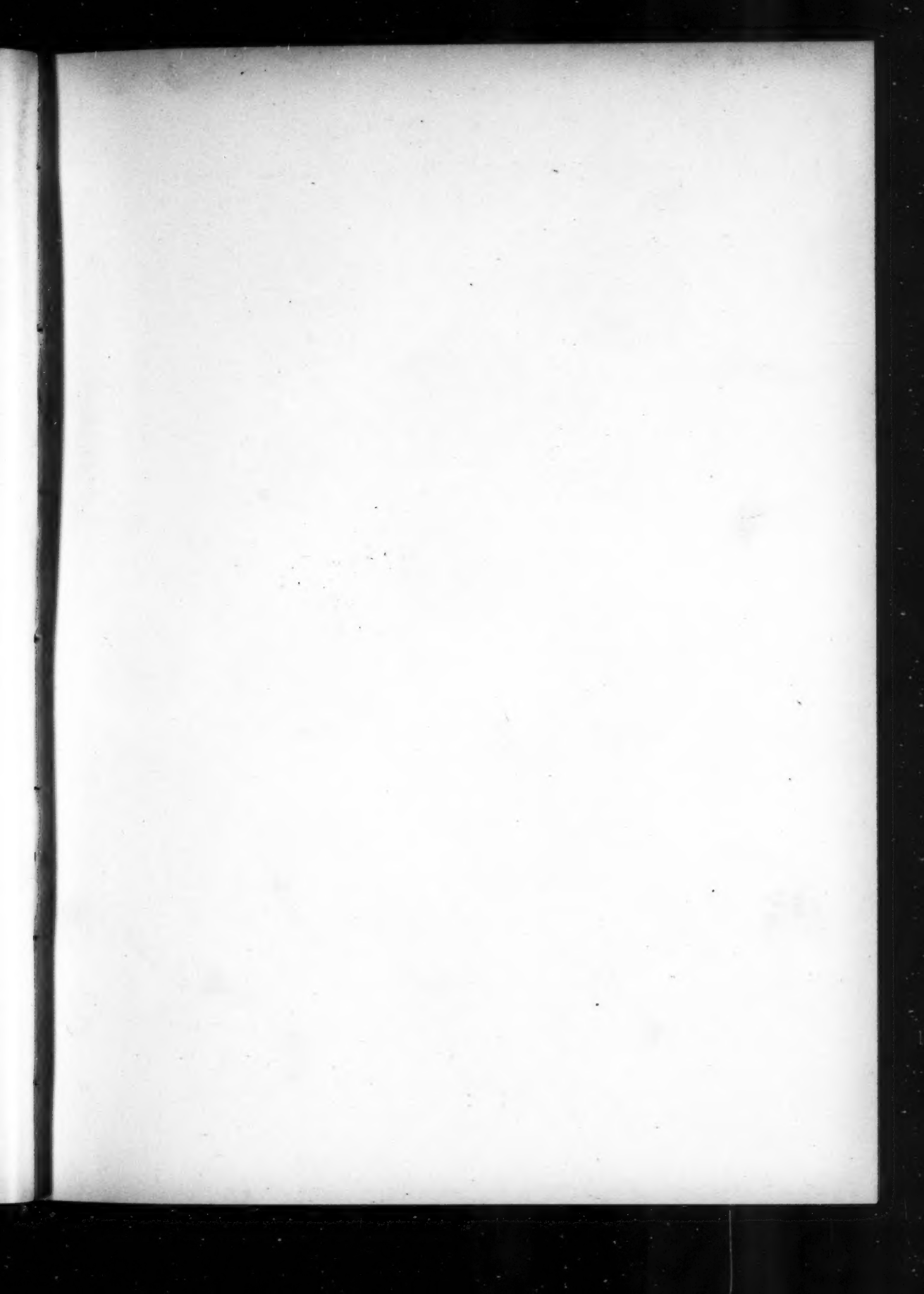
of the chemist's shop, rather than the evolution of decorative art. That blessed word Mesopotamia is "not in it" with some of these newly-coined words. Professor Haddon has also repeated a mistake of Dr. Colley March's in supposing that the flower symbol, which occurs on an early sculptured stone at Dunnichen, in Forfarshire, is a degraded copy of the beast's head symbol on the Norrie's Law silver pendants found near Largo in the same county. It is nothing of the kind. The two symbols are entirely distinct, and occur in several different cases, there being no intermediate forms known.

We must altogether dissent from the principles which to a limited extent govern the evolution of savage art being applied to explain the origin of interlaced work and other characteristic patterns of the early Christian period in Great Britain. They belong essentially to the geometrical stage of decorative art, which was developed in the Hiberno-Saxon MSS. from the seventh to the eleventh century, and subsequently transferred to sculptured stonework.

We have criticised Professor Haddon's book in what we mean to be an entirely friendly spirit; and if we have been unduly severe in pointing out one or two minor blemishes, it is because we take the work seriously as an extremely valuable contribution towards the solution of one of the most interesting, and at the same time one of the most difficult, problems which the ethnologist has to face. On such subjects there must necessarily be great divergencies of opinion, and Professor Haddon is possibly more likely to be in the right than his critic on many of the points on which he is unable to agree with him. The theory of evolution is, after all, only a working hypothesis to the truly scientific man, and does not explain everything; but it has this great advantage, that it stimulates thought in every branch of research, whether it be biology, geology, ethnology, or the study of ornament, by placing the observed facts in an entirely new light.

THE FOLLOWING BOOKS HAVE BEEN RECEIVED FOR NOTICE
IN THE "RELIQUARY."

- MACGIBBON (D.) and ROSS (T.).—"The Ecclesiastical Architecture of Scotland." (David Douglas, Edinburgh.)
- CHALMERS (P. MACGREGOR).—"A Scots Mediaeval Architect." (Wm. Hodge & Co., Glasgow.)
- SAYCE (REV. PROF. A. H.).—"Patriarchal Palestine." (S.P.C.K.)
- SMITH (G.).—"Babylonia." New edition, edited by Prof. Sayce. (S.P.C.K.)
- BRUCE (J.).—"History of Parish of Old Kilpatrick." Part 4. (John Smith & Son, Glasgow.)
- BURNARD (R.).—"Second Report of the Dartmoor Exploration Committee. (Reprint from Devonsh. Assoc. for Advancement of Science, Vol. 27, p. 81.)
- LANGDON (A. G.).—"Old Cornish Crosses." (Joseph Pollard, Truro.)
- ROWE (S.).—"A Perambulation of Dartmoor." 3rd edition, revised by J. Brooking Rowe. (Gibbings & Co.)





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